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**R0349**

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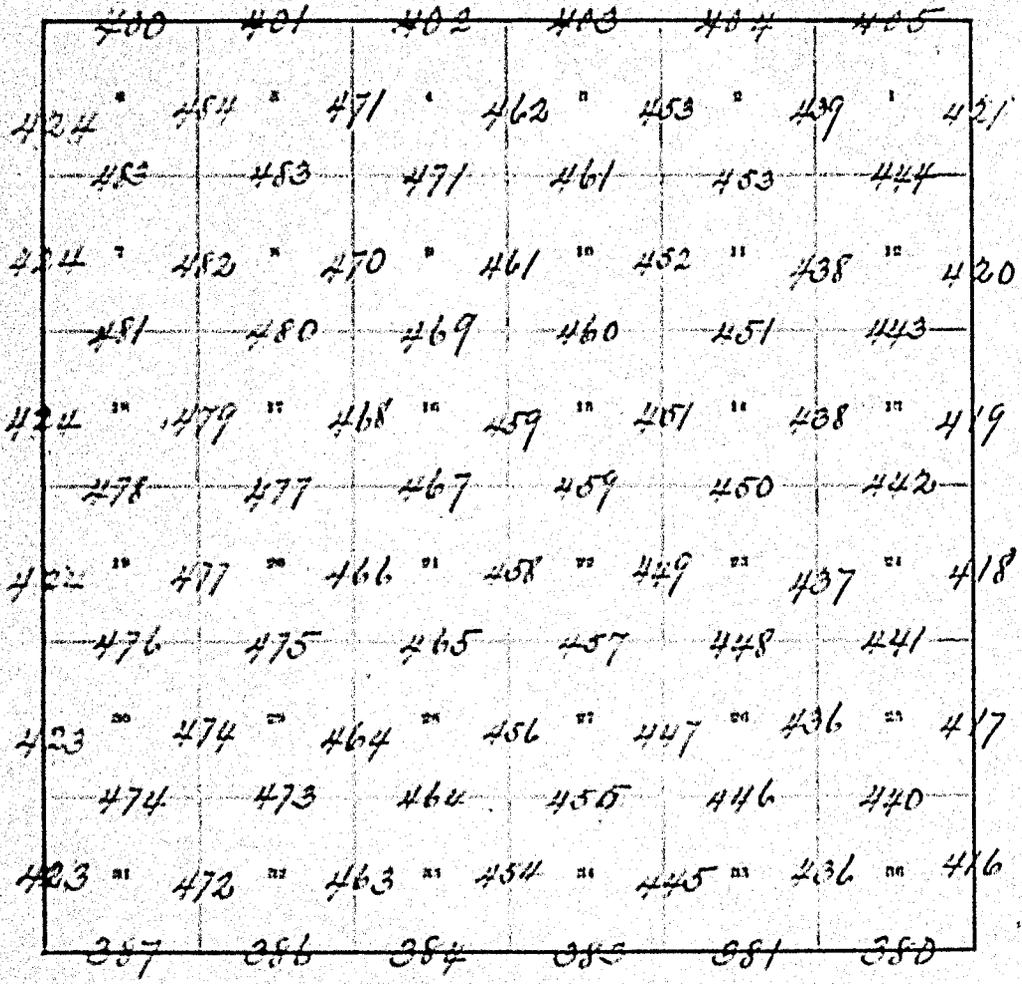
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" F "

STANDARD SURVEYING INSTRUMENTS

BOOK A-349

FILED  
SEP 30 1908  
*MHD*

# FIELD NOTES

OF THE SURVEY OF THE

EAST and SOUTH BOUNDARIES

of

Township No. 23 South,

Range No. 20 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

their

Under ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced March 23, 1908

Survey completed March 26, 1908

*East Bdy high 6-03-05  
South Bdy high 6-00-50*

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton,	Chairman
Walter A. Stumm,	"
Earl Woolley,	Moundman
Homer Petty	"
Claude L. Heist,	Axman
Charlie Stumm,	Flagman

For preliminary affidavits see book "A" Td. 23 S .. R. 18 E.

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PRELIMINARY OATHS OF ASSISTANTS.

WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Chainman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Moundman.*

\_\_\_\_\_, *Moundman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Axman.*

\_\_\_\_\_, *Axman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



I, \_\_\_\_\_, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Flagman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



## EAST BOUNDARY OF T.23 S., R.20 E.

## CHAINS

Survey commenced, March 23, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors, then to test the solar apparatus, by comparing its indications resulting from solar observations, made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of Tps. 22 and 23 S., Rs. 20 and 21 E., heretofore described, in approximate latitude  $38^{\circ}51'N.$  longitude  $109^{\circ}41'W.$ , I set off  $38^{\circ}51'N.$ , on lat. arc,  $1^{\circ}12'N.$  on decl. arc, and at 4h.07m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 7h.17m., p.m., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg, driven in the ground, 5 chs. N. of my station.

March 23, 1908

March 24 : At 7 a.m., I lay off the azimuth of Polaris,  $1^{\circ}31'$ , to the east, and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. east of the mark determined by the solar.

At 8h.06m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $1^{\circ}28'N.$  on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone, already set 5 chs. N. of my station: this mark falls 0.5 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively, about  $0^{\circ}26''$  west and east of the meridian established by the Polaris

## EAST BOUNDARY OF T.22 S., R.20 E.

## CHAINS

observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.30m., a.m. is N.15°59'W., the angle thus determined gives the mag. decl. 15°59'E.

From the Tp. cor. heretofore described, I run

South, bet. secs. 1 and 6.

Descend over mountainous land.

5.50 Hollow, 150 ft. deep, course SE.

Ascend.

28.50 Sandstone ridge, bears E. and W.

Enter scattering cedar and pinon timber.

Descend.

39.00 Hollow, 100 ft. deep, course NE.

Ascend.

43.05 A distance equal to the corresponding line on the W.

Bdy.

Set a sandstone, 15x12x7 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

49.00 Sandstone spur, projects W.

Abrupt descent.

53.00 Hollow, 100 ft. deep, course NW.

Abrupt ascent.

83.05 Set a sandstone, 15x12x4 ins., 10 ins. in the ground, for cor. of secs. 1-6-7 and 12,

marked with 5 notches on S. and 1 notch on N.

edges, from which

A pinon, 12 ins. diam., bears N.47°E., 51 lks. dist., marked T 23 S R 21 E S 6 B T.

A cedar, 8 ins. diam., bears S.12°E., 72 lks. dist., marked T 23 S R 21 E S 7 B T.

A pinon, 12 ins. diam., bears S.23°W., 74 lks. dist., marked T 23 S R 20 E S 12 B T.

EAST BOUNDARY OF T.23 S., R.20 E.

CHAINS

A pinon, 12 ins. diam., bears N.47°W., 25 lks. dist., marked  
T 23 S R 20 E S 1 B T.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 83.05 chs.

South, bet. secs. 7 and 12.

Abrupt ascent over rocky and mountainous land, through  
scattering cedar and pinon timber.

25.00 Rocky spur, projects SE.

Descend.

40.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  
1/4 sec. cor., marked 1/4 on W. face, from which

A pinon, 8 ins. diam., bears N.38°E., 10 lks. dist.,  
marked 1/4 S 7 B T.

A pinon, 12 ins. diam., bears S.23°W., 6 lks. dist., marked  
1/4 S 12 B T.

43.00 Hollow, 100 ft. deep, course NE.

Ascend.

51.00 Spur, projects NE.

Descend.

58.90 Hollow, 100 ft. deep, course NE.

Ascend.

69.80 Spur, projects NE.

Descend.

72.50 Hollow, 75 ft. deep, course NE.

Abrupt ascent.

80.00 Set a sandstone, 18x14x6 ins., 12 ins. in the ground, for  
cor. of secs. 7-12-13 and 18, marked with 4 notches on S.  
and 2 notches on N. edges, from which

A pinon, 12 ins. diam., bears N.52°E., 90 lks. dist.,  
marked T 23 S R 21 E S 7 B T.

A pinon, 12 ins. diam., bears S.54°30'E., 62 lks. dist.,

EAST BOUNDARY OF T.23 S., R.20 E.

CHAINS

marked T 23 S R 21 E S 18 B T.

A pinon, 7 ins. diam., bears S. 57° W., 105 lks. dist.,  
marked T 23 S R 20 E S 13 B T.

A pinon, 4 ins. diam., bears N. 37° W., 44 lks. dist.,  
marked T 23 S R 20 E S 12 B T.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

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South, bet. secs. 13 and 18.

Ascend over rocky and mountainous land, through  
scattering cedar and pinon timber.

24.00 Ridge, bears NW. and SE.

Abrupt descent.

40.00 Set a sandstone, 18x13x6 ins., 12 ins. in the ground, for  
¼ sec. cor., marked ¼ on W. face, from which

A cedar, 7 ins. diam., bears S. 34° E., 96 lks. dist.,  
marked ¼ S 18 B T.

A cedar, 15 ins. diam., bears N. 14° W., 57 lks. dist.,  
marked ¼ S 13 B T.

43.60 Begin abrupt descent over sandstone ledges, bearing  
NW. and SE.

72.50 Foot of abrupt descent, bears NW. and SE.

Leave rocky land and timber.

Gradual descent through dense undergrowth.

80.00 Set a sandstone, 18x10x5 ins., 12 ins. in the ground, for  
cor. of secs. 13-18-19 and 24, marked with 3 notches on N.  
and S. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft.  
dist., and raise a mound of earth, 4 ft. base, 2 ft. high,  
W. of cor.

Land, mountainous and rolling.

EAST BOUNDARY OF T.23 S., R.20 E.

CHAINS

Soil, rocky, 3rd. and 4th. rate. sandy loam, 1st. rate.

Timber, cedar and pinon.

Undergrowth, sage.

Mountainous land, or land covered with dense undergrowth

80.00 chs.

March 24 : At this cor. I set off 1°31'N., on decl. arc, and at 0h.06m., p.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38°49'N.

South, bet. secs. 19 and 24.

Gradual descent through dense undergrowth.

40.00 Set a sandstone, 15x11x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.00 Set a sandstone, 18x8x7 ins., 12 ins. in the ground, for cor. of secs. 19-24-25 and 30, marked with 2 notches on S. and 4 notches on N. edges, dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Land covered with dense undergrowth on 80.00 chs.

South, bet. secs. 25 and 30.

Gradual descent through dense undergrowth.

12.20 Road, bears NW. and SE.

Over level land.

40.00 Set a sandstone, 15x13x4 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

EAST BOUNDARY OF T.23 S., R.20 E.

CHAINS

57.00 Wash, 10 lks. wide, 5 ft. deep, course SE.

67.00 Begin gradual ascent.

80.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for cor. of secs. 25-30-31 and 36, marked with 1 notch on S. and 5 notches on N. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling and level.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, sage.

Land, covered with dense undergrowth on 80.00 chs.

South, bet. secs. 31 and 36.

Gradual ascent, through dense undergrowth.

40.00 Set a sandstone, 15x10x7 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

47.00 Begin abrupt ascent over sandstone ledges, bearing NW. and SE. Enter scattering timber.

68.20 Sandstone ridge, bears NW. and SE.

Abrupt descent.

Leave timber.

80.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for cor. of Tps. 23 and 24 S., Rs. 20 and 21 E., marked 23 S on NE., 21 E on SE., 24 S on SW., and 20 E on NW. face, and with 6 notches on each edge, and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.

Pits impracticable.

Land, mountainous and rolling.

Soil, sandy loam, 1st. rate; rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Land, covered with dense undergrowth and mountainous on 80.00 chs.

March 24, 1908

SOUTH BOUNDARY OF T.23 S.,R.20 E.

CHAINS

March 25 : At 8h.06m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat.arc,  $1^{\circ}51'N.$ , on decl.arc, and determine a meridian with the solar, at the cor.of Tps.23 and 24 S.,Rs.20 and 21 E. Thence I run West, on a random line, along the S.bdy.of T.23 S.,R.20 E., setting temp. $\frac{1}{4}$  sec.and sec.cors.at intervals of 40.00 chs. and at 480.80 chs., fall 60 lks.S.of the cor.of Tps.23 and 24 S.,Rs.19 and 20 E., heretofore described. The falling answers to a correction of  $0^{\circ}04'$ , or 10 lks. N.per mile, counting from the SE.cor.of the Tp.,

March 25, 1908.

March 26 : At 8h.06m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat.arc,  $2^{\circ}15'N.$ , on decl.arc, and determine a meridian with the solar, at the cor.of Tps.23 and 24 S.,Rs.19 and 20 E. thence I run

$S.89^{\circ}56'E.$ , on a true line,  
Bet.secs.6 and 31  
marking and blazing true line,

Descend through dense undergrowth.

- 39.50 Wash, 45 lks.wide, 12 ft.deep, course SE.
  - 40.80 Set a sandstone, 20x13x3 ins., 15 ins.in the ground, for  $\frac{1}{4}$  sec.cor., marked  $\frac{1}{4}$  on N.face, dig pits, 18x18x12 ins., E. and W.of stone, 3 ft.dist., and raise a mound of earth,  $3\frac{1}{2}$  ft.base,  $1\frac{1}{2}$  ft.high, N.of cor.
  - 72.75 Telephone line, between Moab and Thompsons, bears NW.and SE.
  - 77.50 Road, from Moab to Thompsons, bears NW.and SE.
  - 80.80 Set a sandstone, 22x12x3 ins., 16 ins.in the ground, for cor.of secs.5-6-31 and 32, marked with 5 notches on E.and 1 notch on W.edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft.dist., and raise a mound of earth, 4 ft.base, 2 ft.high, W.of cor.
- Land, rolling.  
Soil, sandy loam, 1st.rate.

SOUTH BOUNDARY OF T. 23 S., R. 20 E.

CHAINS

No timber.

Undergrowth, sage.

Land covered with dense undergrowth on 80.80 chs.

S. 89° 56' E., bet. secs. 5 and 32.

Ascend through dense undergrowth.

26.50 Wash, 1.00 ch. wide, 6 ft. deep, course S.

38.50 Begin abrupt ascent over mountainous land, bears NW, and SE.

40.00 Set a lava stone, 15x8x4 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Pits impracticable.

68.00 Ridge, bears NE. and SW.

Abrupt descent.

74.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

80.00 Rocky spur, projects N.

Set a sandstone, 15x10x6 ins., in a mound of stone, for cor. of secs. 4-5-32 and 33, marked with 4 notches on E. and 2 notches on W. edges, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable.

On account of natural obstacles, it is impossible to set this stone in the ground.

Land, mountainous and rolling.

Soil, sandy loam, 1st. rate ; rocky, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Mountainous land or land covered with dense undergrowth, 80.00 chs.

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SOUTH BOUNDARY OF T.23 S., R.20 E.

CHAINS

S. 89° 56' E., bet. secs. 4 and 33.

Descend over rocky and mountainous land.

1.50 Head of hollow, course N.

Ascend.

8.00 Rocky spur, projects N.

Abrupt descent.

14.00 Hollow, 100 ft. deep, course NW.

Abrupt ascent.

24.60 Rocky ridge, bears N. and S.

Abrupt descent.

40.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

41.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

71.50 Rocky ridge, bears N. and S.

Abrupt descent.

79.00 Enter hollow, 150 ft. deep, course S.

80.00 Set a sandstone, 18x8x7 ins., 12 ins. in the ground, for cor. of secs. 3-4-33 and 34, marked with 3 notches on E. and W. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

March 26 : At this cor. I set off 2° 18' N., on decl. arc, and at 0h. 06m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38° 46' N.

## SOUTH BOUNDARY OF T.23 S., R.20 E.

## CHAINS

S.89°56'E., bet. secs. 3 and 34.

In bottom of hollow, course S.

- 4.75 Leave hollow, begin abrupt ascent over rocky and mountainous land.
- 33.50 Rocky spur, projects N.  
Abrupt descent.
- 38.50 Hollow, 100 ft. deep, course N.  
Abrupt ascent.
- 40.00 Spur, projects N.  
Set a sandstone, 12x10x5 ins., 8 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.  
Abrupt descent.
- 56.75 Hollow, 150 ft. deep, course NW.  
Ascend over sandy land.
- 80.00 Set a sandstone, 15x10x6 ins., 10 ins. in the ground, for cor. of secs. 2-3-34 and 35, marked with 2 notches on E. and 4 notches on W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, rocky and sandy, 3rd. rate.  
No timber.  
Mountainous land on 80.00 chs.

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S.89°56'E., bet. secs. 2 and 35.

Ascend over sandy and mountainous land.

- 4.10 Begin abrupt ascent over solid sandstone, through scattering cedar and pinon timber.
- 39.00 Ridge, bears NE. and SW.  
Descend.
- 40.00 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of

SOUTH BOUNDARY OF T.23 S., R.20 E.

CHAINS

stone, 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

54.00 Hollow, 150 ft. deep, course SE.

Abrupt ascent over solid sandstone, cut by deep crevices.

80.00 Set a sandstone, 12x8x7 ins., in a mound of stone, for cor. of secs. 1-2-35 and 36, marked with 1 notch on E. and 5 notches on W. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

This cor. cannot be set in the ground on account of natural obstacles.

Land, mountainous.

Soil sandy, 3rd. rate ; rocky 4th. rate.

Timber, scattering dwarfed, cedar and pinon.

Mountainous land on 80.00 chs.

S. 89° 56' E., bet. secs. 1 and 36.

Ascend abruptly over solid sandstone

12.00 Sandstone ridge, bears NW. and SE.

Abrupt descent over solid sandstone.

29.00 Foot of abrupt descent, bears NW. and SE.

Leave solid sandstone, descend over sandy land, through scattering cedar and pinon timber.

38.00 Hollow, 200 ft. deep, course SE.

Abrupt ascent.

39.00 Begin abrupt ascent over solid sandstone.

40.00 Falls on the steep west slope of solid sandstone, cor. cannot be set.

40.64 Top of sandstone knoll, 30 ft. high, on line, point for witness cor. I but a cross (X) on the smooth surface of the sandstone knoll, at exact point for witness cor. to ¼ sec. cor. mark W C ¼ on N side of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

SOUTH BOUNDARY OF T. 23 S., R. 20 E.

CHAINS

- 48.50 Sandstone spur, projects S.  
Abrupt descent.
- 53.50 Hollow, 200 ft. deep, course SW.  
Abrupt ascent.
- 80.00 The cor. of Tps. 23 and 24 S., Rs. 20 and 21 E.  
Land, mountainous.  
Soil, sandy and rocky, 3rd. and 4th. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.00 chs.

March 26, 1908

BOUNDARIES OF T. 23 S., R. 20 E.  
Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
West Bdy.	North	483.05	483.05			
North Bdy.	S. 89° 53' E.	480.36		0.98	480.36	
East Bdy.	South	483.05		483.05		
South Bdy.	N. 89° 56' W.	480.80	0.56			480.80
Convergency					0.58	
Totals			483.61	484.03 483.61	480.94 480.80	480.80
Error in lat. and dep.				0.42	0.14	

For general description, see Subdivisions of  
T. 23 S., R. 20 E.  
No trace can be found of any old cors. of the old survey  
of the S. bdy. of this Tp.

*Henry D. Smith*  
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,  
United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of S. & E. bdys. of T. 22 S., Rs. 18 and 19 E.; T. 23 S., Rs. 18, 19 and 20 E.; N. bdys. of T. 22 S., Rs. 18 and 19 E.; T. 23 S., R. 20 E. and the E. bdy. of T. 22 S., R. 20 E., S. 1. B. & M., in the state of Utah. showing the respective capacities in which they acted:

- Manderson W. Houghton ..... *Chairman.*
- Walter A. Stumm, ..... *Chairman.*
- Earl Woolley, ..... *Moundman.*
- Homer Petty ..... *Moundman.*
- Claude L. Heist, ..... *Arman.*
- ..... *Arman.*
- Charlie Stumm, ..... *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

....., United States Deputy Surveyor, in surveying all those parts or portions of the the S. & E. bdys. of T. 22 S., Rs. 18 and 19 E.; T. 23 S., Rs. 18, 19 and 20 E.; the N. bdys. of T. 22 S., Rs. 18 and 19 E.; T. 23 S., R. 20 E., and the E. bdy. of T. 22 S., R. 20 E.,

..... of the Salt Lake

Base and ..... meridian, in the state of Utah ..... which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

- Manderson W. Houghton ..... *Chairman.*
- Walter A. Stumm ..... *Chairman.*
- Earl Woolley ..... *Moundman.*
- Homer Petty ..... *Moundman.*
- Claude L. Heist ..... *Arman.*
- ..... *Arman.*
- Charlie Stumm ..... *Flagman.*

Subscribed and sworn to before me this 26th. }  
day of March ..... 190 8

Harvey D. Heist  
.....  
U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 21st. day of March, 1907, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the S. and E. bdys. of T. 22 S., Rs. 18 and 19 E., T. 23 S., Rs. 18, 19 and 20 E.; N. bdys. of T. 22 S., Rs. 18 and 19 E., T. 23 S., R. 20 E., and the E. bdy. of T. 22 S., R. 20 E.,

of the Salt Lake Base and in books A, B, C, D, E, & F. meridian, in the state of Utah, which are represented in the foregoing field notes, as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

*James H. Hill*  
United States Deputy Surveyor.

Subscribed by said Harvey D. Heist, and sworn to before me this 30th day of September, 1908.

*Thomas Hull*  
U.S. Surveyor-General  
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1909.

The foregoing field notes of the survey of the East and South Boundaries of Township No. 23 South, Range No. 20 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood under their contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_ has been correctly copied from the original notes on file in this office.

United States Surveyor General.

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BOOK A-349

FILED

AUG 22 1908

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# FIELD NOTES

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OF THE SURVEY OF THE

SUBDIVISIONS

of

Township No. 23 South, Range No. 18 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

Under <sup>their</sup> ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced March 27, 1908

Survey completed April 8, 1908

*high 54-03-14*  
*low 6-05-96*

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, ..... Chairman

Walter A. Stumm, ..... "

Earl Woolley, ..... Moundman

Homer Petty ..... "

Claude L. Heist, ..... Axman

Charlie Stumm, ..... Flagman

Volume

#

R0349

BOOK A-349

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Meanders Page \_\_\_\_\_

PRELIMINARY OATHS OF ASSISTANTS.

WE, Manderson W. Houghton and Walter A. Stumm,  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Subdivisions of Ts. 22 and 23 S., Rs. 18, 19 and 20 E., S.L.B. & M., in the state of Utah

Manderson W. Houghton, Chainman.  
Walter A. Stumm, Chainman.

Subscribed and sworn to before me this 27th.  
day of March, 1908



J. Harvey D. Geist  
U.S. Deputy Surveyor

WE, Earl Woolley, and Homer Petty,  
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of Subdivisions of Ts. 22 and 23 S., Rs. 18, 19 and 20 E., S.L.B. & M., in the state of Utah

Earl Woolley, Moundman.  
Homer Petty, Moundman.

Subscribed and sworn to before me this 27th.  
day of March, 1908



J. Harvey D. Geist  
U.S. Deputy Surveyor

WE, I, Claude L. Heist,  
do solemnly swear that ~~we~~ <sup>I</sup> will well and truly perform the duties of ~~axman~~ <sup>axman</sup> in the establishment of corners and other duties, according to instructions given ~~us~~ <sup>me</sup>, to the best of ~~my~~ <sup>my</sup> skill and ability, in the survey of Subdivisions of Ts. 22 and 23 S., Rs. 18, 19 and 20 E., S.L.B. & M., in the state of Utah

Claude L. Heist, Axman.  
Axman.

Subscribed and sworn to before me this 27th.  
day of March, 1908



J. Harvey D. Geist  
U.S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of Subdivisions of Ts. 22 and 23 S., Rs. 18, 19 and 20 E., S.L.B. & M., in the state of Utah.

Charlie Stumm, Flagman.

Subscribed and sworn to before me this 27th.  
day of March, 1908



J. Harvey D. Geist  
U.S. Deputy Surveyor

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

Survey commenced, March 27, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours, with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude  $38^{\circ}46'N.$ , longitude  $109^{\circ}56'W.$ , I set off  $38^{\circ}46'N.$  on lat. arc,  $2^{\circ}46'N.$  on decl. arc, and at 4h.06m., p.m., l.m.t., determine with the solar a meridian, and mark a point thereof, on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 7h.00m., p.m., l.m.t., I observe Polaris at western elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg, driven in the ground, 5 chs. N. of my station.

March 27, 1908

March 28: At 7<sup>10</sup> a.m., I lay off the azimuth of Polaris,  $1^{\circ}31'$  to the east, and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins. east of the mark determined by the solar.

At 8h.05m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat. arc,  $3^{\circ}01'N.$ , on decl. arc, and determine a meridian with the solar, and mark a point thereof, by a cross on the stone, already set 5 chs. N. of my station: this mark falls 0.4 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines

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SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

positions for meridians, respectively about, 0'21" west and east of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.15m., a.m., is N.15°49'W., the angle thus determine gives the mag.decl.15°49'E.

From the cor.heretofore described, I run

N.0°01'W., bet.secs.35 and 36.

Ascend over mountainous land.

16.00 Ridge, bears NW.and SE.

Descend through scattering cedar and pinon timber.

40.00 Set a sandstone, 15x12x6 ins., 10 ins.in the ground, for  $\frac{1}{4}$  sec.cor., marked  $\frac{1}{4}$  on W.face, from which

A cedar, 7 ins.diam., bears S.19°E., 83 lks.dist.,  
marked  $\frac{1}{4}$  S 36 B T.

No other trees within limits, and raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$  ft.high, W.of cor.

Pits impracticable.

49.00 Begin abrupt descent over sandstone ledges, bearing NE. and SW. Leave timber.

78.80 Hollow, 200 ft.below top of ledges, course W.

Abrupt ascent over sandstone boulders.

80.00 Falls on a sandstone boulder, 8x5x2 ft.above ground, I cut a cross, (X), at exact point for cor.of secs.25-26-35 and 36, marked 1 notch on S.and E.sides of cross, and raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$  ft.high, W.of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- East, on a random line, bet. secs. 25 and 36.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.08 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs. 25-30-31 and 36, heretofore described.
- Thence I run
- S.  $89^{\circ}58'W.$ , on a true line,
- Bet. secs. 25 and 36.
- Descend over rocky and mountainous land.
- 1.50 Hollow, 100 ft. deep, course NE.
- Abrupt ascent.
- Enter scattering cedar and pinon timber.
- 34.50 Ridge, bears NE. and SW.
- Abrupt descent.
- Leave timber.
- 40.04 Set a sandstone, 15x12x8 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- 47.00 Hollow, 75 ft. deep, course NW.
- Ascend.
- 55.00 Sandstone ridge, bears N. and S.
- Abrupt descent.
- 68.50 Hollow, 75 ft. deep, course N.
- Abrupt ascent.
- 73.20 Rocky ridge, bears NW. and SE.
- Abrupt descent.
- 79.00 Hollow, 100 ft. deep, course SW.
- Abrupt ascent.
- 80.08 The cor. of secs. 25-26-35 and 36.
- Land, mountainous.
- Soil, rocky, 3rd. and 4th. rate.
- Timber, cedar and pinon.
- Mountainous land on 80.08 chs.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

N.0°01'W., bet. secs. 25 and 26.

Ascend abruptly over rocky and mountainous land.

5.50 Rocky ridge, bears NW. and SE.

Abrupt descent.

39.12 Road, bears NE. and SW.

40.00 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

64.00 Foot of abrupt descent, bears E. and W.

Gradual descent over sandy land.

80.00 Set a sandstone, 18x10x3 ins., 12 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked with 2 notches on S. and 1 notch on E. edges, and dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate. sandy, 2nd. rate.

No timber.

Mountainous land on 64.00 chs.

March 28 : At this cor. I set off 3°04'N., on decl. arc, and at 0h.05m., p.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38°48'N.

N.89°58'E., on a random line, bet. secs. 24 and 25.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described on the E. bdy. of the Tp.

Thence I run

S.89°59'W., on a true line,

Bet. secs. 24 and 25.

Ascend gradually through dense undergrowth.

30.00 Begin abrupt ascent over mountainous land, bearing NE. and SW.

CHAINS

40.02 Set a limestone, 15x8x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.

44.50 Rocky spur, projects SW.  
Abrupt descent.

54.00 Foot of abrupt descent, bears NE. and SW.  
Gradual descent.

80.04 The cor. of secs. 23-24-25 and 26.

$\frac{54}{26.04}$   
Land, mountainous and rolling.  
Soil, sandy, 2nd. rate. rocky, 3rd. and 4th. rate.  
No timber.  
Undergrowth, greasewood.

Mountainous land or land covered with dense undergrowth on 84.00 chs.

---

N. 0° 01' W., bet. secs. 23 and 24.

Gradual descent, through scant brush.

24.50 Enter wash, 10 ft. deep, course SW.

31.00 Leave wash.

40.00 Set a sandstone, 20x11x3 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

52.00 Wash, 50 lks. wide, 12 ft. deep, course SW.  
Gradual ascent.

69.00 Begin abrupt ascent, bears NE. and SW.

73.00 Rocky spur, projects E.  
Abrupt descent.

$\frac{55.50}{24.50}$   
80.00 Set a sandstone, 18x10x7 ins., 12 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked with 3 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

Land, cut by washes, and mountainous  
Soil, sandy, 2nd. rate; rocky, 3rd. rate.

No timber.

Undergrowth, greasewood.

Land mountainous or difficult to survey on account of  
washes, on 55.50 chs.

---

N.89°59'E., on a random line, bet. secs. 13 and 24.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs.  
13-18-19 and 24, heretofore described.

Thence I run

West, on a true line,

Bet. secs. 13 and 24.

Over level land, through sparse undergrowth.

21.00 Wash, 1.00 ch. wide, 8 ft. deep, course S.

40.01 Set a sandstone, 24x7x5 ins., 18 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E.  
and W. of stone, 3 ft. dist., and raise a mound of earth,  
3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

68.50 Wash, 50 lks. wide, 15 ft. deep, course S.

Gradual ascent.

74.00 Begin abrupt ascent, bears NW. and SE.

80.02 The cor. of secs. 13-14-23 and 24.

Land, level and mountainous.

Soil, sandy loam, 1st. rate; rocky, 3rd. rate.

No timber.

Undergrowth, greasewood.

Mountainous land on 6.02 chs.

March 28, 1908

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

March 29 : At 8h.05m., a.m., l.m.t., I set off 38°49'N., on lat.arc, 3°25'N. on decl.arc, and determine a meridian with the solar, at the cor. of secs. 13-14-23 and 24.

Thence I run

N.0°01'W., bet. secs. 13 and 14.

Descend over mountainous land.

6.50 Leave mountainous land, bears NW. and SE.

Descend over rolling land.

37.50 Wash, 15 lks. wide, 4 ft. deep, course SE.

Gradual ascent.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 14 on W. face, 13 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist, and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

70.00 Begin abrupt ascent, bears NW. and SE.

76.00 Clay ridge, bears NW. and SE.

Descend.

80.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked with 4 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

12.50  
67.50

Land, mountainous and rolling.

Soil, rocky and clay, 3rd. rate: sandy loam, 1st. rate.

No timber.

Mountainous land on 12.50 chs. ✓

East, on a random line, bet. secs. 12 and 13.

40.00 Set temp. 1/4 sec. cor.

79.98 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

N.89°59'W., on a true line,

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

Bet. secs. 12 and 13.

- Ascend over rolling land.
- 11.00 Wash, 75 lks. wide, 8 ft. deep, course SW.
- 39.99 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 12 on N. face, 13 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓
- 47.50 Wash, 50 lks. wide, 15 ft. deep, course SE.
- 79.98 The cor. of secs. 11-12-13 and 14.
- Land, rolling.
- Soil, sandy loam, 1st. rate.
- No timber.
- 
- N. 0° 01' W., bet. secs. 11 and 12.
- Gradual descent.
- 17.00 Wash, 15 lks. wide, 3 ft. deep, course SE.
- Gradual ascent.
- 35.00 Begin abrupt ascent, bears SE. and NW.
- 40.00 Clay spur, projects SW.
- Set a limestone, 18x12x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓
- Descend.
- 51.00 Hollow, 75 ft. deep, course SW.
- Abrupt ascent.
- 63.75 Ridge, bears NW. and SE.
- Descend.
- 80.00 Set a limestone, 16x8x6 ins., 12 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and 1 notch on E. edge, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.
- Land, rolling and mountainous.

-9-  
3

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

Soil, sandy loam, 1st. rate : clay 2nd. rate.

No timber.

Mountainous land on 45.00 chs.

March 29 : At this cor. I set off  $3^{\circ}28'N.$ , on decl. arc, and at 0h.05m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}50'N.$

---

$S.89^{\circ}59'E.$ , on a random line, bet. secs. 1 and 12.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.94 Intersect E. bdy. of Tp., 7 lks. N. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run

$N.89^{\circ}56'W.$ , on a true line,

Bet. secs. 1 and 12.

Ascend over rolling land.

39.97 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 1 on N. face, 12 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

79.94 The cor. of secs. 1-2-11 and 12.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

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$N.0^{\circ}01'W.$ , on a random line, bet. secs. 1 and 2.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

83.00 Intersect N. bdy. of Tp., 3 lks. E. of the cor. of secs. 1-2-35 and 36, heretofore described.

Thence I run

$S.0^{\circ}02'E.$ , on a true line,

Bet. secs. 1 and 2.

Gradual ascent over rolling land.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

43.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

83.00 The cor. of secs. 1-2-11 and 12.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber. ✓

March 29, 1908

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March 31 : At 8h.04m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat. arc,  $4^{\circ}11'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 2-3-34 and 35, heretofore described, on the S. bdy. of the Tp.

Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 34 and 35.

Descend through dense undergrowth.

9.00 Hollow, 100 ft. deep, course W.

Ascend.

21.00 Begin abrupt ascent over sandstone ledges, bearing E. and W.

35.80 Top of abrupt ascent, 200 ft. above sec. cor., bears E. and W.

Ascend.

40.00 Top of sandstone ridge, bears E. and W.

Set a sandstone, 15x6x6 ins., in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓

Pits impracticable.

It is impossible to set this cor. in the ground on account of natural obstacles.

Descend.

41.00 Begin abrupt descent over sandstone ledges.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 60.00 Foot of abrupt descent, bears E. and W. ✓  
Gradual descent through dense undergrowth.
- 80.00 Set a sandstone, 20x12x3 ins., 15 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked with 1 notch on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high W. of cor. ✓  
Land, rolling and mountainous.  
Soil, sandy, 2nd. rate; rocky, 3rd. and 4th. rate.  
No timber.  
Undergrowth, greasewood.  
Land, covered with dense undergrowth or mountainous land on 80.00 chs. ✓
- 
- East, on a random line, bet. secs. 26 and 35.
- 40.00 Set temp. ¼ sec. cor.
- 80.00 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 25-26-35 and 36.  
Thence I run  
N. 89° 59' W., on a true line, ✓  
Bet. secs. 26 and 35.  
Ascend over rocky and mountainous land.
- 1.50 Spur, projects SW.  
Abrupt descent.
- 9.50 Foot of abrupt descent, beats NW. and SE.  
Gradual descent, through dense undergrowth.
- 40.00 Set a sandstone, 15x12x5 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor. ✓
- 80.00 The cor. of secs. 26-27-34 and 35. ✓  
Land, mountainous and rolling.  
Soil, rocky, 3rd. and 4th. rate.; sandy, 2nd. rate.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.00 chs. ✓

N.0°01'W., bet. secs. 26 and 27.

Over level land, through dense undergrowth.

4.05 Road, bears NE. and SW.

15.50 Wash, 30 lks. wide, 12 ft. deep, course SW.

20.50 Wash, 25 lks. wide, 10 ft. deep, course SW.

40.00 Set a sandstone, 15x12x10 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. ✓

50.25 Begin abrupt ascent, bears NE. and SW.

54.00 Spur, projects E.

Descend.

55.50 Hollow, 75 ft. deep, course E.

Ascend.

61.00 Ridge, bears E. and W.

Descend.

80.00 Set a sandstone, 18x12x10 ins., 12 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked with 2 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. ✓

Pits impracticable.

Land, level and mountainous.

Soil, sandy, 2nd. rate; rocky, 3rd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

March 31: At this cor. I set off 4°14'N., on decl. arc, and at 0h.04m., p.m., l.m.t., observe the sun on the meridian,

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

the resulting lat. is 38°48'N.

S.89°59'E., on a random line, bet. secs. 23 and 26.

40.00 Set temp. 1/4 sec. cor.

80.06 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 23-24-25 and 26.

Thence I run

N.89°58'W., on a true line,

Bet. secs. 23 and 26.

Gradual descent through dense undergrowth.

34.50 Wash, 15 lks. wide, 12 ft. deep, course SW.

40.03 Set a sandstone, 15x12x8 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Pits impracticable.

40.25 Wash, 15 lks. wide, 5 ft. deep, course S.

Begin abrupt ascent, bears N. and S.

42.50 Sandstone spur, projects N.

Abrupt descent.

51.00 Hollow, 75 ft. deep, course NE.

Abrupt ascent.

80.06 The cor. of secs. 22-23-26 and 27.

Land, rolling and mountainous.

Soil, sandy, 2nd. rate; rocky, 3rd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.06 chs.

N.0°01'W., bet. secs. 22 and 23.

Descend over rocky and mountainous land.

4.50 Hollow, 75 ft. deep, course E.

Ascend.

9.50 Spur, projects E.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

Descend.

13.20 Hollow, 100 ft. deep, course E.

Ascend.

21.57 sandstone ridge, bears E. and W.

Descend over solid sandstone.

32.00 Leave solid sandstone, over sandy land.

40.00 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

42.75 Hollow, 75 ft. deep, course E.

Ascend.

45.50 Ascend over solid sandstone.

66.00 Sandstone spur, projects E.

Abrupt descent.

75.00 Hollow, 75 ft. deep, course SE.

Ascend over sandstone ledges.

80.00 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked with 3 notches on S. and 2 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky and sandy, 3rd. and 4th. rate.

No timber.

Mountainous land on 80.00 chs.

S. 89° 58' E., on a random line, bet. secs. 14 and 23.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.08 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 13-14-23 and 24.

Thence I run

S. 89° 58' W., on a true line,

Bet. secs. 14 and 23.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- Ascend abruptly over mountainous land.
- 22.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 33.00 Hollow, 150 ft. deep, course S.  
Abrupt ascent.
- 40.04 Set a sandstone, 32x14x7 ins., 24 ins. in the ground, for  $\frac{1}{2}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 41.00 Rocky spur, projects S.  
Abrupt descent.
- 46.00 Hollow, 150 ft. deep; course S.  
Abrupt ascent.
- 54.20 Ridge, bears N. and S.  
Abrupt descent.
- 62.00 Hollow, 150 ft. deep, course S.  
Abrupt ascent.
- 80.08 The cor. of secs. 14-15-22 and 23.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
No timber.  
Mountainous land on 80.08 chs.

March 31, 1908

April 1 : At 8h. 04m., a.m., l.m.t., I set off  $38^{\circ}49'N.$  on lat. arc,  $4^{\circ}34'N.$ , on decl. arc, and determine a meridian with the solar at the cor. of secs. 14-15-22 and 23.

Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 14 and 15.

Ascend over rocky and mountainous land.

- 9.00 Begin abrupt ascent, bears E. and W.
- 18.30 Ridge, bears E. and W.  
Abrupt descent.
- 40.00 Set a lava stone, 18x14x12 ins., 12 ins. in the ground, for

## SUBDIVISIONS OF T.23 S., R.18 E.

- CHAINS  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable. ✓
- 44.00 Hollow, 150 ft. deep, course NE.  
Abrupt ascent.
- 47.00 Spur, projects NE.  
Abrupt descent.
- 71.00 Enter wide hollow, 100 ft. deep, course SE.
- 80.00 Set a sandstone, 18x10x7 ins., 12 ins. in the ground, for  
cor. of secs. 10-11-14 and 15, marked with 4 notches on S.  
and 2 notches on E. edges, dig pits, 18x18x12 ins., in each  
sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base,  
2 ft. high, W. of cor. ✓  
Land, mountainous.  
Soil, rocky and sandy, 3rd. and 4th. rate. ✓  
No timber.  
Mountainous land on 80.00 chs.
- 
- N.  $89^{\circ}58'E.$ , on a random line, bet. secs. 11 and 14.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.04 Intersect the cor. of secs. 11-12-13 and 14.  
Thence I run  
S.  $89^{\circ}58'W.$ , on a true line,  
Bet. secs. 11 and 14.  
Ascend over mountainous land.
- 7.00 Clay ridge, bears NW. and SE.  
Abrupt descent.
- 15.75 Foot of abrupt descent, bears NW. and SE.  
Gradual descent, through dense undergrowth.
- 40.02 Set a limestone, 28x10x3 ins., 21 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E.  
and W. of stone, 3 ft. dist., and raise a mound of earth,  
 $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 72.75 Wash, 25 lks. wide, 10 ft. deep, course SE.  
Ascend.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

80.04 The cor. of secs. 10-11-14 and 15.  
 Land, mountainous and rolling.  
 Soil, clay, 2nd. rate; sandy loam, 1st. rate.  
 No timber.  
 Undergrowth, greasewood.  
 Land covered with dense undergrowth or mountainous land on 80.04 chs.

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N. 0° 01' W., bet. secs. 10 and 11.  
 Descend through dense undergrowth.

8.00 Wash, 25 lks. wide, 10 ft. deep, course SE.  
 Gradual ascent.

14.00 Begin abrupt ascent, bears NW. and SE.

16.00 Ridge, bears E. and W.  
 Descend.

25.00 Begin rolling ascent.

40.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked with 5 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling and mountainous.  
 Soil, clay, 2nd. rate; sandy loam, 1st. rate.  
 No timber.  
 Undergrowth, greasewood.  
 Land covered with dense undergrowth or mountainous land on 80.00 chs.  
 April 1: At this cor. I set off 4° 38' N., on decl. arc, and at 0h. 04m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38° 50' N.

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SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

- N.89°58'E., on a random line, bet. secs. 2 and 11.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.02 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 1-2-11 and 12.
- Thence I run
- S.89°59'W., on a true line,  
Bet. secs. 2 and 11.
- Ascend over mountainous land.
- 23.00 Clay ridge, bears NW. and SE.
- Abrupt descent.
- 29.00 Hollow, 75 ft. deep, course SW.
- Abrupt ascent.
- 30.00 Spur, projects SW.
- Abrupt descent.
- 39.00 Foot of abrupt descent, bears NW. and SE.
- Descend over rolling land, through dense undergrowth.
- 40.01 Set a sandstone, 20x14x3 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 80.02 The cor. of secs. 2-3-10 and 11.
- Land, mountainous and rolling.
- Soil, clay, 2nd. rate; sandy loam, 1st. rate.
- No timber.
- Undergrowth, greasewood.
- Land covered with dense undergrowth or mountainous land on 80.02 chs.
- 
- N.0°01'W., on a random line, bet. secs. 2 and 3.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 83.18 Intersect N. bdy. of Tp., 5 lks. W. of the cor. of secs. 2-3-34 and 35, heretofore described.
- Thence I run

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

S.0°01'W., on a true line,  
Bet. secs. 2 and 3.

Ascend over rolling land, through dense undergrowth.

43.18 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 3 on W. face, 2 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

45.00 Ridge, bears NW. and SE.  
Abrupt descent.

51.00 Foot of abrupt descent, bears NW. and SE.  
Descend over rolling land.

83.18 The cor. of secs. 2-3-10 and 11.  
Land, rolling and mountainous.  
Soil, clay, 2nd. rate ; sandy loam, 1st. rate.  
No timber.

Undergrowth, sage and greasewood.  
Land, covered with dense undergrowth or mountainous land on 83.18 chs.

April 1, 1908.

April 2 : At 8h. 04m., a.m., l.m.t., I set off 38°46'N., on lat. arc, 4°57'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 3-4-33 and 34, heretofore described on the S. bdy. of the Tp.

Thence I run

N.0°02'W., bet. secs. 33 and 34.

Gradual ascent over sandy land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 33 on W. face, and 34 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

SUBDIVISIONS OF T. 23 S., R. 18 E.

CHAINS

- 41.75 Road, bears NE. and SW.
- 43.50 Wash, 1.00 ch. wide, 50 ft. deep, course SW.
- 70.00 Wash, 50 lks. wide, 25 ft. deep, course SW.
- 80.00 Set a sandstone, 15x12x6 ins., 10 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked with 1 notch on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.  
Soil, sandy, 2nd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 80.00 chs.

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- EAST, on a random line, bet. secs. 27 and 34.
- 40.00 Set temp. ¼ sec. cor.
- 79.96 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 26-27-34 and 35.  
Thence I run  
S. 89° 58' W., on a true line,  
Bet. secs. 27 and 34.  
Descend through dense undergrowth.
- 4.70 Road, bears NE. and SW.
- 12.75 Wash, 20 lks. wide, 15 ft. deep, course SW.
- 39.98 Set a sandstone, 18x10x3 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
- 75.50 Wash, 30 lks. wide, 10 ft. deep, course S.
- 79.96 The cor. of secs. 27-28-33 and 34.  
Land, rolling.  
Soil, sandy, 2nd. rate.  
No timber.  
Undergrowth, sage and greasewood.

SUBDIVISION OF T.23 S., R.18 E.

CHAINS

Land covered with dense undergrowth on 79.06 chn.

N.0°02'W., bet. near. 27 and 28.

Ascend through dense undergrowth.

25.50 Ascend abruptly over shifting sand, bears NE. and SW.

30.60 Spur, projects NE.  
Descend.

36.75 Hollow, 75 ft. deep, course NE.  
Ascend.

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for  
1/4 sec. cor., marked 1/4 on W. face, dig pits, 18x18x12 ins.,  
N. and S. of stone, 3 ft. dist., and raise a mound of earth,  
3 1/2 ft. base, 1 1/2 ft. high, E. of cor.

42.25 Spur, projects NE.  
Descend.

55.00 Hollow, 100 ft. deep, course NE.  
Ascend.

63.00 Spur, projects E.  
Descend.

80.00 Set a sandstone, 20x12x5 ins., 15 ins. in the ground, for cor.  
of near. 21-22-27 and 28, marked with 2 notches on S. and  
3 notches on E. edges, dig pits, 18x18x12 ins., in each near.,  
5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft.  
high, E. of cor.

Land, rolling and mountainous.

Soil, shifting sand, 3rd. rate.

No timber.

Undergrowth, groundwood and sage.

Land covered with dense undergrowth or  
mountainous land on 80.00 chn.

April 2: At this cor. I set off 5°01'N., on decl. arc, and  
at 0h.04m., a.m., l.r.t., observed the sun on the meridian,  
the resulting lat. is 38°48'N.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

N.89°58'E., on a random line, bet. secs. 22 and 27.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 8 lks. N. of the cor. of secs. 22-23-26 and 27.

Thence I run

N.89°59'W., on a true line,  
Bet. secs. 22 and 27.

Ascend over rocky and mountainous land.

34.00 Ridge, bears NW. and SE.

Descend.

40.01 Set a sandstone, 15x9x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

48.50 Hollow, 100 ft. deep, course S.

Abrupt ascent.

72.50 Rocky spur, projects S.

Abrupt descent.

75.50 Hollow, 100 ft. deep, course S.

Abrupt ascent.

80.02 The cor. of secs. 21-22-27 and 28.

Land, mountainous.

Soil, sandy and rocky, 3rd. rate.

No timber.

Mountainous land on 80.02 chs.

N.0°02'W., bet. secs. 21 and 22.

Descend over mountainous land.

0.10 Head of hollow, course E.

Ascend.

16.50 Spur, projects E.

Descend.

21.00 Hollow, 50 ft. deep, course E.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

- Ascend.
- 38.50 Spur, projects NE.
- Descend.
- 40.00 Set a sandstone, 15x14x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓
- 58.00 Hollow, 100 ft. deep, course E.
- Abrupt ascent.
- 73.00 Spur, projects E.
- Abrupt descent.
- 76.00 Hollow, 75 ft. deep, course NE.
- Abrupt ascent.
- 80.00 Set a sandstone, 15x12x10 ins., 10 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked 23 S on NE. and 18 E on SE. face, and with 3 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable. ✓
- Land, mountainous.
- Soil, rocky, 3rd. rate.
- No timber.
- Mountainous land on 80.00 chs.

April 2, 1908

April 3 : At 8h.03m., a.m., l.m.t, I set off  $38^{\circ}49'N.$ , on lat. arc,  $5^{\circ}21'N.$ , on decl. arc, and determine a meridian with the solar at the cor. of secs. 15-16-21 and 22.

Thence I run

S.  $89^{\circ}59'E.$ , on a random line, bet. secs. 15 and 22.

- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.06 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 14-15-22 and 23.
- Thence I run

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

N.89°58'W., on a true line,

Bet. secs. 15 and 22.

Ascend over rocky and mountainous land.

- 8.00 Begin abrupt ascent, bears NE. and SW.
- 13.00 Rocky spur, projects S.  
Abrupt descent.
- 28.00 Hollow, 100 ft. deep, course S.  
Abrupt ascent.
- 38.50 Rocky ridge, bears NW. and SE.  
Abrupt descent.
- 40.03 Set a sandstone, 15x8x6 ins., 10 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 73.50 Hollow, 150 ft. deep, course SE.  
Abrupt ascent.
- 80.06 The cor. of secs. 15-16-21 and 22.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
No timber.  
Mountainous land on 80.06 chs.

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N.0°02'W., bet. secs. 15 and 16.

Descend over rocky and mountainous land.

- 4.50 Hollow, 150 ft. deep, course SE.  
Abrupt ascent.
- 8.50 Spur, projects E.  
Abrupt descent.
- 39.00 Hollow, 100 ft. deep, course SE.  
Ascend along west slope.
- 40.00 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,  
2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

Pits impracticable.

80.00 Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable. ✓

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.00 chs. ✓

S. 89° 58' E., on a random line, bet. secs. 10 and 15.

40.00 Set temp. 1/4 sec. cor.

80.16 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 10-11-14 and 15.

Thence I run

N. 89° 57' W., on a true line,

Bet. secs. 10 and 15.

Ascend through dense undergrowth.

35.00 Begin abrupt ascent, bears NW. and SE.

40.08 Set a lava stone, 18x6x5 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Pits impracticable.

44.00 Spur, projects N.

Descend.

48.50 Hollow, 50 ft. deep, course N.

Ascend.

65.00 Ridge, bears NW. and SE.

Abrupt descent.

80.16 The cor. of secs. 9-10-15 and 16.

Land, mountainous and rolling.

Soil, sandy loam, 1st. rate.; rocky, 3rd. rate.

## SUBDIVISIONS OF T. 23 S., R. 18 E.

## CHAINS

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on mountainous land on 80.16 chs.

April 3: At this cor. I set off  $5^{\circ}24'N.$ , on decl. arc, and at 0h.03m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}50'N.$

$N.0^{\circ}02'W.$ , bet. secs. 9 and 10.

Ascend abruptly over mountainous land.

6.35 Spur, projects W.

Abrupt descent.

7.50 Hollow, 75 ft. deep, course SW.

Ascend.

9.50 Ridge, bears NW. and SE.

Descend.

28.00 Hollow, 75 ft. deep, course E.

Ascend.

31.60 Rocky ridge, bears E. and W.

Descend.

35.00 Over level land, through dense undergrowth.

40.00 Set a sandstone, 24x8x8 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

73.00 Begin abrupt ascent, bears NW. and SE.

80.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked with 5 notches on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous and level.

Soil, rocky, 3rd. rate: sandy loam, 1st. rate.

No timber.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

Undergrowth, sage and greasewood. ✓  
Land covered with dense undergrowth or mountainous ✓  
land on 80.00 chs.

-----  
S.89°57'E., on a random line, bet. secs. 3 and 10.

40.00 Set temp. 1/4 sec. cor.

80.06 Intersect N. and S. line, 10 lks. S. of the cor. of secs.  
2-3-10 and 11.

Thence I run

S.89°59'W., on a true line,  
Bet. secs. 3 and 10.

Ascend through dense undergrowth.

33.00 Rocky spur, projects SE.

Descend.

40.03 Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for 1/4  
sec. cor., marked 1/4 on N. face, and raise a mound of stone,  
2 ft. base, 1 1/2 ft. high, N. of cor. ✓

Pits impracticable. ✓

40.10 Hollow, 50 ft. deep, course SE.

Abrupt ascent.

63.00 Ridge, bears NW. and SE.

Abrupt descent.

80.06 The cor. of secs. 3-4-9 and 10. ✓

Land, rolling and mountainous.

Soil, sandy loam, 1st. rate; rocky, 3rd. rate. ✓

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or ✓  
mountainous land on 80.06 chs.

-----  
N.0°02'W., on a random line, bet. secs. 3 and 4.

40.00 Set temp. 1/4 sec. cor.

83.24 Intersect N. bdy. of Tp., 10 lks. E. of the cor. of secs.  
3-4-33 and 34, heretofore described.

Thence I run

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

S.0°06'E., on a true line,

Bet. secs. 3 and 4.

Ascend over mountainous land.

5.00 Clay ridge, bears NW. and SE.

Abrupt descent.

11.00 Foot of abrupt descent, bears NW. and SE.

Descend over rolling land, through dense undergrowth.

43.24 Set a granite stone, 18x8x5 ins., 12 ins. in the ground, for

$\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins.,

N. and S. of stone, 3 ft. dist., and raise a mound of earth,

$3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

53.00 Begin abrupt ascent over rocky land, bears NW. and SE.

73.00 Ridge, bears NW. and SE.

Abrupt descent.

83.24 The cor. of secs. 3-4-9 and 10.

Land, mountainous and rolling.

Soil, clay and rocky, 3rd. rate; sandy loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or

mountainous land on 83.24 chs.

April 3, 1908.

April 4 : At 8h. 03m., a.m., l.m.t., I set off 38°46'N., on lat. arc, 5°44'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 4-5-32 and 33, heretofore described, on the S. bdy. of the Tp.

Thence I run

N.0°03'W., bet. secs. 32 and 33.

Gradual ascent over sandy land, through dense undergrowth.

8.60 Begin abrupt ascent over nearly perpendicular sandstone ledges, bearing NE. and SW.

9.50 Top of abrupt ascent, 200 ft. above sec. cor.

Over solid sandstone, along steep E. slope.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 23.00 Sandstone spur, projects NE.  
Abrupt descent.
- 32.00 Hollow, 100 ft. deep, course NE.  
Abrupt ascent over solid sandstone,
- 38.00 Sandstone ridge, bears NE. and SW.  
Abrupt descent over solid sandstone.
- 39.58 On a shelf of the solid sandstone, point for witness cor.  
Set a sandstone, 20x8x4 ins., 15 ins. in the ground, for  
witness corner to  $\frac{1}{4}$  sec. cor., marked W C  $\frac{1}{4}$  on W. face, and  
raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 40.00 Falls on the steep slope of solid sandstone, cannot be  
set.
- 47.50 Hollow, 150 ft. deep, course W.  
Abrupt ascent.
- 54.00 Rocky spur, projects W.  
Abrupt descent.  
Leave rocky land, over shifting sand.
- 62.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 71.00 Ridge, bears NW. and SE.  
Descend.
- 80.00 Set a sandstone, 28x8x5 ins., 21 ins. in the ground, for  
cor. of secs. 28-29-32 and 33, marked with 1 notch on S.  
and 4 notches on E. edges, dig pits, 18x18x12 ins., in each  
sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base,  
2 ft. high, W. of cor.  
Land, rolling and mountainous.  
Soil, rocky and shifting sand, 4th. rate : sandy 2nd. rate.  
No timber.  
Undergrowth, greasewood.  
Land covered with dense undergrowth or  
mountainous land on 80.00 chs.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- East, on a random line, bet. secs. 28 and 33.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.04 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 27-28-33 and 34.
- Thence I run
- S.  $89^{\circ}59'W.$ , on a true line,  
Bet. secs. 28 and 33.
- Ascend over shifting sand, through dense undergrowth.
- 40.02 Set a sandstone, 24x10x3 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 57.00 Begin abrupt ascent, bears NE. and SW.
- 68.00 Ridge, bears NE. and SW.
- Descend.
- 70.50 Hollow, 50 ft. deep, course NE.
- Ascend.
- 80.04 The cor. of secs. 28-29-32 and 33.
- Land, rolling and mountainous.
- Soil, shifting sand, 3rd. rate.
- No timber.
- Land covered with dense undergrowth or mountainous land on 80.04 chs.
- April 4 : At this cor. I set off  $5^{\circ}47'N.$ , on decl. arc, and at 0h.03m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}47'N.$
- 
- N.  $0^{\circ}03'W.$ , bet. secs. 28 and 29.
- Descend over mountainous land.
- 26.00 Hollow, 75 ft. deep, course NE.
- Ascend.
- 34.50 Ridge, bears NE. and SW.
- Descend over broken and rocky land.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 40.00 Set a sandstone, 20x15x5 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 69.00 Hollow, 75 ft. deep, course NE.  
Ascend.
- 71.00 Spur, projects E.  
Descend.
- 74.50 Hollow, 50 ft. deep, course E.  
Ascend.
- 80.00 Set a sandstone, 15x8x8 ins., 10 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked with 2 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, sandy and rocky, 3rd. rate.  
No timber.  
Mountainous land on 80.00 chs.
- 
- N.  $89^{\circ}59'$  E., on a random line, bet. secs. 21 and 28.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.08 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 21-22-27 and 28.  
Thence I run  
S.  $89^{\circ}58'$  W., on a true line,  
Bet. secs. 21 and 28.  
Ascend over rocky and mountainous land.
- 40.04 Set a sandstone, 18x6x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 65.50 Ridge, bears N. and S.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

Descend.

74.50 Hollow, 75 ft. deep, course NE.

Ascend.

80.08 The cor. of secs. 20-21-28 and 29.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.08 chs.

---

N.0°03'W., bet. secs. 20 and 21.

Ascend over rocky and mountainous land.

2.00 Spur, projects NE.

Descend.

37.00 Hollow, 60 ft. deep, course NE.

Ascend.

40.00 Set a sandstone, 18x13x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

60.00 Spur, projects NE.

Descend.

71.00 Hollow, 75 ft. deep, course E.

Ascend.

80.00 Set a sandstone, 20x10x8 ins., 15 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked with 3 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

April 4, 1908

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

April 5 : At 8h.03m., a.m., l.m.t., I set off  $38^{\circ}49'N.$ , on lat.arc,  $6^{\circ}06'N.$ , on decl.arc, and determine a meridian with the solar, at the cor. of secs. 16-17-20 and 21.

Thence I run

$N.89^{\circ}58'E.$ , on a random line, bet. secs. 16 and 21.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.12 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 15-16-21 and 22.

Thence I run

$S.89^{\circ}59'W.$ , on a true line,

Bet. secs. 16 and 21.

Ascend abruptly over rocky and mountainous land.

1.40 Top of abrupt ascent, bears N. and S.

Over level and rocky land, through dense undergrowth.

30.00 Begin abrupt descent, bears NW. and SE.

38.00 Foot of abrupt descent, bears NW. and SE. Descend.

40.06 Set a sandstone,  $15 \times 12 \times 5$  ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓

Pits impracticable.

60.00 Hollow, 100 ft. deep, course SE.

Abrupt ascent.

80.12 The cor. of secs. 16-17-20 and 21. ✓

Land, mountainous and level.

Soil, rocky, 3rd. rate.

No timber.

Undergrowth, sage.

Land covered with dense undergrowth, or

mountainous land on 80.12 chs.

$N.0^{\circ}03'W.$ , bet. secs. 16 and 17.

Ascend over rocky and mountainous land.

1.50 Spur, projects E.

Descend.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

- 6.50 Hollow, 75 ft. deep, course SE.  
Ascend.
  - 30.50 Ridge, bears NE. and SW.  
Descend.
  - 35.00 Hollow, 75 ft. deep, course NE.  
Abrupt ascent.
  - 40.00 Rocky ridge, bears NE. and SW.  
Set a lava stone, 18x7x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Descend.
  - 43.50 Hollow, 75 ft. deep, course NE.  
Ascend.
  - 57.00 Spur, projects E.  
Descend.
  - 59.00 Hollow, 75 ft. deep, course NE.  
Ascend.
  - 62.00 Ridge, bears NE. and SW.  
Descend.
  - 80.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked with 4 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
No timber.  
Mountainous land on 80.00 chs.
- 
- N. 89° 59' E., on a random line, bet. secs. 9 and 16.
  - 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
  - 80.10 Intersect N. and S. line, 5 lks. N. of the cor. of secs.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 9-10-15 and 16.  
Thence I run  
N.89°59'W., on a true line,  
Bet. secs. 9 and 16.  
Descend over rocky and mountainous land.
- 0.30 Hollow, 100 ft. deep, course S.  
Abrupt ascent.
- 40.05 Set a lava stone, 20x8x5 ins., 15 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 59.00 Spur, projects N.  
Descend.
- 66.50 Hollow, 75 ft. deep, course NE.  
Ascend.
- 77.50 Spur, projects N.  
Descend.
- 80.10 The cor. of secs. 8-9-16 and 17. ✓  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
No timber.  
Mountainous land on 80.10 chs. ✓  
April 5 : At this cor. I set off 6°10'N., on decl. arc,  
and at 0h.03m., p.m., l.m.t., observe the sun on the  
meridian, the resulting lat. is 38°50'N.
- 
- N.0°03'W., bet. secs. 8 and 9.  
Descend over rocky and mountainous land.
- 0.75 Hollow, 150 ft. deep, course NE.  
Abrupt ascent.
- 6.75 Spur, projects NE.  
Descend.
- 9.25 Hollow, 60 ft. deep, course NE.  
Ascend.
- 14.50 Ridge, bears NE. and SW.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS	
	Descend.
25.00	Hollow, 100 ft. deep, course NE.
	Ascend.
39.00	Spur, projects NE.
	Descend.
40.00	Set a granite stone, 15x12x10 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
59.00	Hollow, 100 ft. deep, course NW.
	Ascend over clay.
80.00	Set a sandstone, 20x12x3 ins., 15 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec. 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, mountainous.
	Soil, rocky and clay, 3rd. rate.
	No timber.
	Mountainous land on 80.00 chs.
	—————
	S. 89°59'E., on a random line, bet. secs. 4 and 9.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.18	Intersect N. and S. line, 5 lks. S. of the cor. of secs. 3-4-9 and 10.
	Thence I run
	S. 89°59'W., on a true line,
	Bet. secs. 4 and 9.
	Descend along broken south slope, over mountainous land.
40.09	Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 60.50 Foot of abrupt descent, bears NW. and SE.  
Descend over broken clay hills.
- 80.18 The cor. of secs. 4-5-8 and 9.  
Land, mountainous.  
Soil, clay, 3rd. rate.  
No timber.  
Mountainous land on 80.18 chs.
- 
- N.0°03'W., on a random line, bet. secs. 4 and 5.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 83.20 Intersect N. bdy. of Tp., 10 lks. W. of the cor. of secs.  
4-5-32 and 33.  
Thence I run  
S.0°01'W., on a true line,  
Bet. secs. 4 and 5.  
Ascend over rocky and mountainous land.
- 36.00 Spur, projects NE.  
Descend.
- 42.00 Hollow, 50 ft. deep, course NE.  
Ascend.
- 43.20 Set a sandstone, 15x8x6 ins., 10 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,  
2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. ✓  
Pits impracticable.
- 66.00 Ridge, bears E. and W.  
Abrupt descent.
- 74.00 Foot of abrupt descent, bears NW. and SE.  
Over broken clay hills, descend.
- 83.20 The cor. of secs. 4-5-8 and 9. ✓  
Land, mountainous.  
Soil, rocky or clay, 3rd. rate.  
No timber.  
Mountainous land on 83.20 chs.

April 5, 1908

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

April 6 : At 8h.03m., a.m., l.m.t, I set off  $38^{\circ}46'N.$ , on lat.arc,  $6^{\circ}29'N.$ , on decl.arc, and determine a meridian with the solar, at the cor.of secs.5-6-31 and 32, heretofore described, on the S.bdy.of the Tp.

Thence I run

$N.0^{\circ}03'W.$ , bet.secs.31 and 32.

Gradual ascent over rolling land and shifting sand, through dense undergrowth.

36.00 Wash, 1.00 ch.wide, 5 ft.deep, course SW.

40.00 Set a sandstone,  $15 \times 12 \times 3$  ins., 10 ins.in the ground, for  $\frac{1}{4}$  sec.cor., marked  $\frac{1}{4}$  on W.face, dig pits,  $18 \times 18 \times 12$  ins., N. and S.of stone, 3 ft.dist., and raise a mound of earth,  $3\frac{1}{2}$  ft.base,  $1\frac{1}{2}$  ft.high, W.of cor. ✓

80.00 Set a sandstone,  $15 \times 12 \times 3$  ins., 10 ins.in the ground, for cor.of secs.29-30-31 and 32, marked with 1 notch on S.and 5 notches on E.edges, dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft.dist., and raise a mound of earth, 4 ft.base, 2 ft. high, W.of cor. ✓

Land, rolling.

Soil, shifting sand, 3rd.rate.

No timber.

Undergrowth, greasewood and sage.

Land, covered with dense undergrowth on 80.00 chs. ✓

East, on a random line, bet.secs.29 and 32.

40.00 Set temp. $\frac{1}{4}$  sec.cor.

79.92 Intersect N.and S.line, 5 lks.S.of the cor.of secs. 28-29-32 and 33.

Thence I run

$S.89^{\circ}58'W.$ , on a true line,

Bet.secs.29 and 32.

Ascend over mountainous land.

2.50 Ridge, bears NW.and SE.

Abrupt descent.

9.75 Hollow, 100 ft.deep, course SW.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

- Abmupt ascent.
- 15.00 Spur, projects SW.  
Descend over rolling sandy land, through dense undergrowth.
- 39.96 Set a sandstone, 20x12x3 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓
- 68.00 Hollow, 100 ft. deep, course S.  
Ascend.
- 79.92 The cor. of secs. 29-30-31 and 32.  
Land, mountainous and rolling.  
Soil, shifting sand, 3rd. rate.  
No timber. ✓  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 79.92 chs.

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- West, on a random line, bet. secs. 30 and 31.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 78.69 Intersect W. bdy. of Tp., 3 lks. S. of the cor. of secs. 25-30-31 and 36, which is a cross, (X), marked on the solid sandstone, marked and witnessed as described by the surveyor general.  
Thence I run  
S. 89° 59' E., on a true line,  
Bet. secs. 30 and 31.  
Descend over solid sandstone.
- 0.50 Leave solid sandstone, bears N. and S.  
Deacend over rolling sandy land, through dense undergrowth.
- 38.69 Set a conglomerate stone, 15x10x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓  
Pits impracticable.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 78.69 The cor. of secs. 29-30-31 and 32.  
 Land, rolling.  
 Soil, solid sandstone, 4th. rate; shifting sand, 3rd. rate.  
 No timber.  
 Undergrowth, greasewood and sage.  
 Land covered with dense undergrowth on 78.19 chs.  
 April 6 : At this cor. I set off  $6^{\circ}32'N.$ , on decl. arc,  
 and at 0h.03m., p.m., l.m.t., observe the sun on the  
 meridian, the resulting lat. is  $38^{\circ}47'N.$
- 
- $N.0^{\circ}03'W.$ , bet. secs. 29 and 30.
- 14.00 Ascend over rolling sandy land, through dense undergrowth.  
 Begin abrupt ascent over solid sandstone, bears E. and W.
- 33.00 Ridge, bears NW. and SE.  
 Leave solid sandstone, descend over sandy land.
- 40.00 Set a sandstone,  $20 \times 12 \times 3$  ins., 15 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits,  $18 \times 18 \times 12$  ins.,  
 N. and S. of stone, 3 ft. dist., and raise a mound of earth,  
 $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 54.00 Hollow, 100 ft. deep, course E.  
 Ascend.
- 64.00 Spur, projects E.  
 Descend.
- 70.00 Hollow, 100 ft. deep, course E.  
 Ascend.
- 74.00 Spur, projects E.  
 Descend.
- 78.00 Hollow, 75 ft. deep, course E.  
 Abrupt ascent.
- 80.00 Set a limestone,  $15 \times 12 \times 9$  ins., 10 ins. in the ground, for  
 cor. of secs. 19-20-29 and 30, marked with 2 notches on S.  
 and 5 notches on E. edges, and raise a mound of stone, 2  
 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
 Pits impracticable.

## SUBDIVISIONS OF T.23 S., R.18 W.

## CHAINS

Land, rolling and mountainous.

Soil, shifting sand, 3rd. rate. solid sandstone, 4th. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or  
mountainous land on 80.00 chs. ✓

N.  $89^{\circ}58'E.$ , on a random line, bet. secs. 20 and 29.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.94 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 20-21-  
28 and 29.

Thence I run

S.  $89^{\circ}59'W.$ , on a true line,

Bet. secs. 20 and 29.

Ascend over rocky, broken and mountainous land.

30.00 Ridge, bears NE. and SW.

Descend.

39.97 Set a sandstone, 18x10x8 ins., in a mound of stone, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable. ✓

It is impossible to set this cor. in the ground, on  
account of natural obstacles.

40.50 Hollow, 60 ft. deep, course SW.

Ascend.

43.50 Spur, projects S.

Descend.

57.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

79.94 The cor. of secs. 19-20-29 and 30. ✓

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 79.94 chs.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

N.89°59'W., on a random line, bet.secs.19 and 30.

40.00 Set temp. ¼ sec.cor.

78.64 Intersect W.bdy.of Tp., 12 lks.S.of the cor.of secs.19-24-25 and 30, which is a sandstone, 8x8x4 ins.above ground, marked and witnessed as described by the surveyor general.

Thence I run

S.89°54'E., on a true line,

Bet.secs.19 and 30.

Descend over rocky and mountainous land.

0.50 Hollow, 100 ft.deep, course NW.

Abrupt ascent.

3.00 Rocky ridge, bears NW.and SE.

Descend.

5.50 Foot of descent, bears NW.and SE.

Ascend.abruptly over broken sandstone ledges.

31.00 Top of abrupt ascent and flat topped ridge, bears NE. and SW.

Over solid sandstone.

38.64 Set a sandstone, 18x9x4 ins., 12 ins.in the ground, for ¼ sec.cor., marked ¼ on N.face, and raise a mound of stone, 2 ft.base, 1½ ft.high, N.of cor.

Pits impracticable.

41.00 Leave ridge, begin abrupt descent over broken sandstone ledges, bearing NE. and SW.

76.00 Hollow, 150 ft.below top of ridge, course SE.

Abrupt ascent.

78.00 Rocky spur, projects S.

Abrupt descent.

78.64 The cor.of secs.19-20-29 and 30.

Land, mountainous.

Soil, rocky, 3rd. and 4th.rate.

No timber

Mountainous land on 78.64 chs.

April 6, 1908

## SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS	
	<p>April 7 : At 8h.02m., a.m., l.m.t., I set off <math>38^{\circ}48'N.</math>, on lat. arc, <math>6^{\circ}52'N.</math>, on decl. arc, and determine a meridian with the solar, at the cor. of secs. 19-20-29 and 30.</p> <p>Thence I run</p> <p style="padding-left: 40px;"><math>N.0^{\circ}03'W.</math>, bet. secs. 19 and 20.</p> <p>Ascend over solid sandstone and mountainous land.</p>
10.00	<p>Rocky spur, projects E.</p> <p>Descend.</p>
19.00	<p>Hollow, 75 ft. deep, course E.</p> <p>Ascend.</p>
40.00	<p>Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked <math>\frac{1}{4}</math> on W. face, and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor.</p> <p>Pits impracticable.</p>
40.35	<p>Rocky ridge, bears NE. and SW.</p> <p>Abrupt descent.</p>
55.00	<p>Hollow, 100 ft. deep, course SW.</p> <p>Abrupt ascent.</p>
59.00	<p>Rocky spur, projects E.</p> <p>Abrupt descent.</p>
67.00	<p>Same hollow, 100 ft. deep, course SE.</p> <p>Abrupt ascent.</p>
80.00	<p>Set a lava stone, 15x12x7 ins., 10 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked with 3 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, <math>1\frac{1}{2}</math> ft. high, W. of cor.</p> <p>Pits impracticable.</p> <p>Land, mountainous.</p> <p>Soil, rocky, 3rd. and 4th. rate.</p> <p>No timber.</p> <p>Mountainous land on 80.00 chs.</p>

## SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS	N.89°59'E., on a random line, bet. secs. 17 and 20.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.16	Intersect N. and S. line, 15 lks. N. of the cor. of secs. 16-17-20 and 21.
	Thence I run
	N.89°55'W., on a true line,
	Bet. secs. 17 and 20.
	Descend over rocky and mountainous land.
5.00	Hollow, 75 ft. deep, course SE.
	Ascend.
21.00	Rocky spur, projects S.
	Abrupt descent.
27.50	Hollow, 100 ft. deep, course SE.
	Abrupt ascent.
31.00	Rocky spur, projects S.
	Abrupt descent.
37.75	Hollow, 50 ft. deep, course SW.
	Abrupt ascent.
40.08	Set a sandstone, 15x14x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
41.75	Spur, projects SW.
	Abrupt descent.
47.50	Hollow, 125 ft. deep, course S.
	Abrupt ascent, along steep south slope.
76.00	Ridge, bears N. and S.
	Abrupt descent.
80.16	The cor. of secs. 17-18-19 and 20.
	Land, mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	No timber.
	Mountainous land on 80.16 chs.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

N.89°54'W., on a random line, bet. secs.18 and 19.

40.00 Set temp. 1/4 sec. cor.

78.48 Intersect W.bdy. of Tp., 5 lks. N. of the cor. of secs.

13-18-19 and 24, which is a sandstone, 18x8x6 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

S.89°56'E., on a true line,

Bet. secs.18 and 19.

Ascend abruptly over mountainous land, along steep, rocky and broken N. slope.

27.50 Rocky ridge, bears NE. and SW.

Abrupt descent.

38.48 Set a lava stone, 15x12x6 ins., 10 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Pits impracticable.

62.00 Hollow, 150 ft. deep, course SE.

Abrupt ascent.

78.48 The cor. of secs. 17-18-19 and 20.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

Mountainous land on 78.48 chs.

April 7 : At this cor. I set off 6°55'N., on decl. arc, and at 0h.02m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°49'N.

N.0°03'W., bet. secs.17 and 18.

Ascend abruptly over rocky and mountainous land.

7.00 Rocky ridge, bears E. and W.

Abrupt descent.

36.00 Hollow, 200 ft. deep, course W.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- Abrupt ascent, over lava boulders.
- 40.00 Falls on a lava boulder, 3x3x3 ft. above ground, I cut a cross (X), at exact point for  $\frac{1}{4}$  sec. cor., mark  $\frac{1}{4}$  on W. side of cross, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓
- Pits impracticable.
- 43.00 Rocky spur, projects SW.
- Abrupt descent.
- 45.00 Hollow, 100 ft. deep, course SW.
- Abrupt ascent, over broken sandstone ledges.
- 61.00 Rocky ridge, bears NW. and SE.
- Abrupt descent.
- 73.00 Hollow, 100 ft. deep, course E.
- Abrupt ascent.
- 80.00 Set a lava stone, 20x7x7 ins., 15 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked with 4 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓
- Pits impracticable.
- Land, mountainous.
- Soil, rocky, 3rd. and 4th. rate.
- No timber.
- Mountainous land on 80.00 chs. ✓
- 
- S.  $89^{\circ}55'$  E., on a random line, bet. secs. 8 and 17.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.22 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 8-9-16 and 17.
- Thence I run.
- N.  $89^{\circ}59'$  W., on a true line,
- Bet. secs. 8 and 17.
- Descend over rocky and mountainous land.
- 0.25 Hollow, 150 ft. deep, course NE.
- Abrupt ascent.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 18.75 Ridge, bears NW. and SE.  
Descend.
- 38.50 Hollow, 75 ft. deep, course N.  
Ascend.
- 40.11 Set a lava stone, 18x12x5 ins., 12 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 47.00 Spur, projects N.  
Descend.
- 58.00 Hollow, 100 ft. deep, course N.  
Abrupt ascent.
- 80.22 The cor. of secs. 7-8-17 and 18.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
No timber.  
Mountainous land on 80.22 chs.

April 7, 1908

April 8 : At 8h.02m., a.m., l.m.t., I set off  $38^{\circ}50'N.$ , on  
lat. arc,  $7^{\circ}14'N.$ , on decl. arc, and determine a meridian with  
the solar, at the cor. of secs. 7-8-17 and 18.

Thence I run

$N.89^{\circ}56'W.$ , on a random line, bet. secs. 7 and 18.

- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.

- 78.32 Intersect W. bdy. of Tp., 10 lks. S. of the cor. of secs.  
7-12-13 and 18, which is a sandstone, 7x6x5 ins. above  
ground, marked and witnessed as described by the surveyor  
general.

Thence I run

$S.89^{\circ}52'E.$ , on a true line,

Bet. secs. 7 and 18.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

Descend over sandy land, through dense undergrowth.

3.00 Hollow, 75 ft. deep, course NW.

Ascend.

30.00 Ridge, bears NW. and SE.

Descend.

38.32 Set a lava stone, 15x8x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓

44.50 Hollow, 100 ft. deep, course NW.

Begin abrupt ascent over lava boulders.

70.00 Ridge, bears N. and S.

Abrupt descent.

78.32 The cor. of secs. 7-8-17 and 18.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.: sandy, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 78.32 chs.

N. 0° 03' W., bet. secs. 7 and 8.

Ascend abruptly over rocky and mountainous land.

3.50 Rocky spur, projects NE.

Descend.

11.50 Hollow, 75 ft. deep, course NE.

Ascend.

16.00 Ridge, bears NE. and SW.

Descend.

25.00 Hollow, 75 ft. deep, course NE.

Ascend.

30.50 Ridge, bears NE. and SW.

Descend.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

- 38.75 Hollow, 75 ft. deep, course NE.  
Ascend.
- 40.00 Set a lava stone, 15x12x10, 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 41.00 Spur, projects NE.  
Abrupt descent.
- 76.50 Hollow, 150 ft. deep, course NW.  
Ascend.
- 80.00 Set a granite stone, 24x8x8 ins., 18 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked with 5 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, rocky, 5rd. rate.  
No timber.  
Mountainous land on 80.00 chs.
- 
- S.  $89^{\circ}59'$  E., on a random line, bet. secs. 5 and 8.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.14 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 4-5-8 and 9.  
Thence I run  
S.  $89^{\circ}59'$  W., on a true line,  
Bet. secs. 5 and 8.  
Descend over broken clay hills.
- 31.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 37.00 Clay spur, projects S.  
Abrupt descent.
- 39.70 Hollow, 100 ft. deep, course S.

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

Abrupt ascent.

40.07 Set a limestone, 24x12x3 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

41.25 Clay spur, projects S.

Abrupt descent.

46.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

47.00 Clay spur, projects S.

Abrupt descent.

48.00 Hollow, 100 ft. deep, course S.

Abrupt ascent.

50.00 Clay spur, projects S.

Abrupt descent.

55.00 Foot of abrupt descent, bears NW. and SE.

Descend over broken clay land.

80.14 The cor. of secs. 5-6-7 and 8.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.14 chn.

April 8 : At this cor. I set off 7°17' N., on decl. arc, and at Oh. 02m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°50' N.

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N. 89°52' W., on a random line, bet. secs. 6 and 7.

49.00 Set temp.  $\frac{1}{4}$  sec. cor.

78.28 Intersect W. bdy. of Tp., 10 lks. N. of the cor. of secs.

1-6-7 and 12, which is a sandstone, 10x5x4 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

S. 89°56' N., on a true line,

## SUBDIVISIONS OF T.23 S., R.18 E.

## CHAINS

Bet. secs. 6 and 7.

Ascend over rocky and mountainous land.

10.00 Rocky spur, projects NW.

Descend.

27.75 Hollow, 100 ft. deep, course NW.

Ascend.

37.00 Spur, projects S.

Descend.

38.28 Set a lava stone, 15x8x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

41.00 Hollow, 75 ft. deep, course SW.

Ascend.

48.00 Ridge, bears NW. and SE.

Descend.

71.00 Hollow, 100 ft. deep, course NW.

Ascend.

78.28 The cor. of secs. 5-6-7 and 8.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 78.28 chs.

---

N.  $0^{\circ}03'W.$ , on a random line, bet. secs. 5 and 6.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

83.15 Intersect N. bdy. of Tp., 21 lks. W. of the cor. of secs. 5-6-31 and 32, heretofore described.

Thence I run

S.  $0^{\circ}06'W.$ , on a true line,

Bet. secs. 5 and 6.

Ascend over rocky and mountainous land.

20.00 Spur, projects W.

Descend.

SUBDIVISIONS OF T.23 S., R.18 E.

CHAINS

- 22.90 Hollow, 50 ft. deep, course NW.  
Abrupt ascent.
- 29.75 Ridge, bears E. and W.  
Descend.
- 34.00 Hollow, 100 ft. deep, course E.  
Ascend.
- 39.15 Rocky spur, projects E.  
Abrupt descent.
- 41.00 Hollow, 100 ft. deep, course E.  
Abrupt ascent.
- 43.15 Set a sandstone, 18x7x6 ins., 12 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 47.60 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 52.00 Rocky spur, projects SW.  
Abrupt descent.
- 58.00 Hollow, 100 ft. deep, course W.  
Ascend over clay.
- 80.50 Spur, projects SW.  
Descend.
- 83.15 The cor. of secs. 5-6-7 and 8.  
Land, mountainous.  
Soil, rocky and clay, 3rd. rate.  
No timber.  
Mountainous land on 83.15 chs.

April 8, 1908

## GENERAL DESCRIPTION OF T. 23 S. R. 18 E.

This township is broken in character and the soil varies from a rich black loam in the north east portion to solid sandstone in the western portion.

The soil in the north eastern portion is a rich black loam out by clay ridge and is capable of producing crops with irrigation, while the balance is sandstone, shifting sand or clay and is used only for winter range for sheep.

A scattering growth of cedar and pinon timber is found in the south east portion of the township, while on the balance of the township no timber is found.

There is no water on this township.

There are no indications of mineral found on this township.

There are no settlers in this township.

*Harvey D. First*

U. S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by \_\_\_\_\_  
 \_\_\_\_\_, United States Deputy Surveyor, to assist in running, measuring, and  
 marking the lines and corners described in the foregoing field notes of the survey of \_\_\_\_\_  
 \_\_\_\_\_  
 showing the respective capacities in which they acted:  
 For list of names and final oaths of assistants see book "L", Chainman.  
 T. 23 S., R. 20 E. \_\_\_\_\_, Chainman.  
 \_\_\_\_\_, Moundman.  
 \_\_\_\_\_, Moundman.  
 \_\_\_\_\_, Axman.  
 \_\_\_\_\_, Axman.  
 \_\_\_\_\_, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted \_\_\_\_\_  
 \_\_\_\_\_, United States Deputy Surveyor, in surveying all  
 those parts or portions of the \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_ of the \_\_\_\_\_  
 \_\_\_\_\_ meridian, \_\_\_\_\_ of \_\_\_\_\_, which are represented  
 in the foregoing field notes as having been surveyed by him and under his direction; and that said survey  
 has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the  
 corner monuments established, according to the instructions furnished by the United States Surveyor  
 General for \_\_\_\_\_  
 \_\_\_\_\_, Chainman.  
 \_\_\_\_\_, Chainman.  
 \_\_\_\_\_, Moundman.  
 \_\_\_\_\_, Moundman.  
 \_\_\_\_\_, Axman.  
 \_\_\_\_\_, Axman.  
 \_\_\_\_\_, Flagman.

Subscribed and sworn to before me this \_\_\_\_\_ }  
 day of \_\_\_\_\_, 190 \_\_\_\_\_ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, \_\_\_\_\_, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from \_\_\_\_\_, United States Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final affidavit see book "L" T. 23 S., R. 20 E.

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

\_\_\_\_\_  
United States Deputy Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 190 9.

The foregoing field notes of the survey of the subdivisional lines of Township No. 23 South, Range No. 18 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood under ~~his~~ their contract No. 298, dated March 21, 190 7, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

\_\_\_\_\_  
United States Surveyor General.

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BOOK A-349

# FIELD NOTES

FILED  
AUG 31 1908

OF THE SURVEY OF THE

SUBDIVISIONS

of

Township No. 22 South,

Range No. 18 East,

Of the Salt Lake Base and Meridian,

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

their

Under ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced April 9, 1908

Survey completed April 22, 1908

*High* 46-41-28  
*Low* 13-61-71

*16*

*18*

*7.16*

*WJH*

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chairman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

For preliminary affidavits see book "G" T. 23 S., R. 18 N.

BOOK A-349

INDEX DIAGRAM.

Township 22 South, Range 18 East,

6	49	5	36	4	26	3	17	2	9	1
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7	46	8	33	9	25	10	16	11	8	12
46		45		32		24		15		7
18	44	17	32	16	23	15	14	14	7	13
43		43		31		22		14		6
19	42	20	30	21	22	22	13	23	5	24
41		40		30		21		12		4
30	39	29	29	28	20	27	12	26	3	25
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Meanders Page

PRELIMINARY OATHS OF ASSISTANTS.

WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Chainman.*  
\_\_\_\_\_, *Chainman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Moundman.*  
\_\_\_\_\_, *Moundman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Axman.*  
\_\_\_\_\_, *Axman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



I, \_\_\_\_\_, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Flagman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



## SUBDIVISIONS OF T.22 S., R.18 E.

Survey commenced, April 9, 1908, and executed with the instrument described in book " A ", of this survey. I examine the adjustments of the transit, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I Proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude,  $38^{\circ}51'N.$ , longitude,  $109^{\circ}55'W.$ , I set off  $38^{\circ}51'N.$ , on lat. arc,  $7^{\circ}44'N.$ , on decl. arc, and at 4h.02m., p.m., l.m.t., determine with the solar a meridian, and mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

April 9, 1908

April 10 : At 0h.13m., a.m., l.m.t., I observe Polaris at lower culmination, in accordance with Manual of Instructions and mark a point in the line thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.3 ins. east of the mark determined by the solar.

At 8h.01m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $7^{\circ}59'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross, on the stone, already set 5 chs. N. of my station; this mark falls 0.3 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about 0'16" west and east of the meridian established by the Polaris observations; therefore, I conclude, that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.30m.

SUBDIVISIONS OF T.27 S., R.18 E.

CHAINS

a.c. is N.15°40'W., the angle thus determined gives the mag. decl. 15°40'E.

From the cor. of secs. 1-2-35 and 36, heretofore described, I run

N.0°01'W., bet. secs. 35 and 36.

Descend over rolling land, through sparse brush.

9.00 Wash, 1.00 ch. wide, 5 ft. deep, course SE.

Gradual ascent.

26.00 Spur, projects SE.

Gradual descent.

40.00 Set a sandstone, 15x12x3 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

45.00 Hollow, 50 ft. deep, course SE. Wash in bottom.

80.00 Set a sandstone, 15x9x4 ins., 10 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked with 1 notch on E. and S. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling,

Soil, sandy loam, 2nd. rate.

No timber.

Undergrowth, scant sage and greasewood.

S.89°58'E., on a random line, bet. secs. 25 and 36.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.00 Intersect E. bdy. of Tp., at the cor. of secs. 25-30-31 and 36, heretofore described.

Thence I run

N.89°58'W., on a true line,

Bet. secs. 25 and 36.

Ascend gradually over rolling land.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS	
25.00	Begin abrupt ascent, bears N. and S.
29.00	Top of abrupt ascent, bears N. and S. Ascend.
39.00	Begin descent, bears N. and S.
40.01	Set a sandstone, 15x8x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
48.00	Begin abrupt descent, bears N. and S.
52.00	Hollow, 75 ft. deep, course S. Ascend.
64.00	Spur, projects S. Descend.
72.00	Wash, 1.00 ch. wide, 5 ft. deep, course SE.
80.02	The cor. of secs. 25-26-35 and 36.
55.02	Land, rolling and mountainous. Soil, sandy loam, 1st. rate. clay, 2nd. rate. No timber. Mountainous land on 55.02 chs.
25.00	
	N. 0° 01' W., bet. secs. 25 and 26.
	Ascend over rolling land, through dense undergrowth.
4.00	Wash, 1.00 ch. wide, 5 ft. deep, course SW., <sup>W. ascend</sup> ascend.
14.00	Spur, projects SW. Descend.
20.00	Hollow, 50 ft. deep, course SW. Ascend.
40.00	Set a sandstone, 16x8x5 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
70.00	Spur, projects SW. Descend.
77.00	Hollow, 50 ft. deep, course SW.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Ascend.

80.00 Set a sandstone, 15x10x5 ins., 10 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked with 2 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Dense undergrowth on 80.00 chs.

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S.  $89^{\circ}58'E.$ , on a random line, bet. secs. 24 and 25.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect E. bdy. of Tp., 5 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.

Thence I run

N.  $89^{\circ}56'W.$ , on a true line,

Bet. secs. 24 and 25.

Descend over rolling land.

17.00 Hollow, 50 ft. deep, course SW.

Ascend, abruptly.

25.00 Top of abrupt ascent, bears N. and S.

Begin gradual descent.

29.00 Begin abrupt descent, bears NE. and SW.

34.00 Foot of abrupt descent, bears NE. and SW.

Descend over rolling land.

37.00 Hollow, 75 ft. deep, course SW.

Ascend.

40.01 Set a sandstone, 15x8x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., N. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

56.00 Ridge, bears NE. and SW.

## SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS	Descend.
77.00	Hollow, 50 ft. deep, course SW. Ascend.
80.02 63.02 17.00	The cor. of secs. 23-24-25 and 26. Land, rolling and mountainous. Soil, sandy loam, 1st. rate : clay, 2nd. rate. No timber. Mountainous land on 63.02 chs. April 10 : At this cor. I set off $8^{\circ}02'N.$ , on decl. arc, and at 0h.01m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is $38^{\circ}53'N.$  N. $0^{\circ}01'W.$ , bet. secs. 23 and 24. Ascend over rolling land, through dense undergrowth.
14.00	Ridge, bears NE. and SW. Descend.
19.00	Hollow, 75 ft. deep, course SW. Ascend.
40.00	Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
45.00	Spur, projects SW. Descend.
48.00	Hollow, 50 ft. deep, course W. Ascend.
51.00	Spur, projects W. Descend.
56.00	Hollow, 50 ft. deep, course W. Ascend over rolling land.
78.00	Road, bears NW. and SE., from Valley City, to Little Grande.
80.00	Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for cor. of secs. 13-14, 23 and 24, marked with 3 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each

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SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

- sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling.  
 Soil, clay, 3rd. rate.  
 No timber.  
 Undergrowth, sage and greasewood.  
 Land, covered with dense undergrowth on 80.00 chs.
- 
- S.  $89^{\circ}56'E.$ , on a random line, bet. secs. 13 and 24.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.04 Intersect E. bdy. of Tp., at the cor. of secs. 13-18-19 and 24, heretofore described.
- Thence I run
- N.  $89^{\circ}56'W.$ , on a true line,  
 Bet. secs. 13 and 24.
- Ascend over rolling land, through dense undergrowth.
- 8.00 Ridge, bears NE. and SW.  
 Descend.
- 40.02 Hollow, 75 ft. deep, course SW.  
 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
 Ascend.
- 50.00 Spur, projects SW.  
 Descend.
- 55.00 Hollow, 50 ft. deep, course SW.  
 Ascend.
- 70.00 Spur, projects SW.  
 Descend.
- 80.04 The cor. of secs. 13-14-23 and 24.  
 Land, rolling.  
 Soil, sandy loam, 1st. rate : clay, 3rd. rate.  
 No timber.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Undergrowth, sage and greasewood.

Land, covered with dense undergroth on 80.04 chs.

N.  $0^{\circ}01'W.$ , bet. secs. 13 and 14.

Descend over rolling land, through dense undergrowth.

36.00 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 14 on W. face, 13 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq. with marked stone, 24 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked  
 T 22 S S 12 on NE., 1 no  
 R 18 E S 13 on SE.,  
 S 14 on SW., and  
 S 11 on NW. face, and with 4 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist, and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling.

Soil, clay loam, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land, covered with dense indergrowth on 80.00 chs.

April 10, 1908.

April 11 : At 8h. 01m., a.m., 1.m.t., I set off  $38^{\circ}55'N.$ , on lat. arc,  $8^{\circ}21'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 11-12-13 and 14.

Thence I run

S.  $89^{\circ}56'E.$ , on a random line, bet. secs. 12 and 13.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.00 Intersect E. bdy. of Tp., 7 lks. S. of the cor. of secs. 7-12-13 and 18, heretofore described.

SUBDIVISIONS OF T. 22 S., R. 18 E.

CHAINS

Thence I run

N. 89° 59' W., on a true line,  
Bet. sec. 12 and 13.

Gradual descent through dense undergrowth.

40.00 Set a sandstone, 16x7x5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

40.50 Begin abrupt descent, bears NE. and SW.

41.50 Foot of abrupt descent, bears NE. and SW.

Descend over rolling land.

48.00 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

80.00 The cor. of secs. 11-12-13 and 14.

Land, rolling.

Soil, sandy loam, 1st. rate ; clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.00 chs.

N. 0° 01' W., bet. secs. 11 and 12.

Descend over rolling land, through dense undergrowth.

40.00 Set a sandstone, 16x8x8 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

49.50 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

Ascend over broken clay land.

80.00 Set a sandstone, 16x12x5 ins., 11 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

Land, rolling and broken.

Soil, clay loam 2nd. rate ; clay, 3rd. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or

mountainous land on 80.00 chs.

S.89°59'E., on a random line, bet. secs. 1 and 12.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run

S.89°59'W., on a true line,

Bet. secs. 1 and 12.

Descend along south slope, over broken clay land.

39.99 Set a sandstone, 18x10x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

79.98 The cor. of secs. 1-2-11 and 12.

Land, broken clay hills, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 79.98 chs.

April 11: At this cor. I set off 8°24'N., on decl. arc, and at 0h.01m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°56'N.

N.0°01'W., on a random line, bet. secs. 1 and 2.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

86.79 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 1-2-35 and 36, heretofore described.

Thence I run

S.0°03'E., on a true line,

Bet. secs. 1 and 2.

Descend over broken clay land.

8.50 Old railroad grade, bears E. and W.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- 11.00 Road from Thompson's to Little Grande, bears E. and W.
- 24.70 Wash, 1.50 chs. wide, 20 ft. deep, course SW.
- 46.79 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 50.50 Wash, 75 lks. wide, 10 ft. deep, course SW.
- 57.70 Wash, 90 lks. wide, 10 ft. deep, course SW.
- 66.00 Wash, 1.00 ch. wide, 12 ft. deep, course SW.
- Ascend.
- 81.20 Ridge, bears NE. and SW.
- Descend.
- 86.79 The cor. of secs. 1-2-11 and 12.
- Land, broken by many washes, mountainous.
- Soil, clay, 3rd. rate.
- No timber.
- Mountainous land on 86.79 chs.

April 11, 1908.

April 12 : At 8h. 01m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $8^{\circ}43'N.$ , on decl. arc, and determine a meridian with the solar at the cor. of secs. 2-3-34 and 35, heretofore described on the S. bdy. of the Tp.

Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 34 and 35.

Gradual ascent, over rolling land.

- 40.00 Set a sandstone, 28x10x3 ins., 21 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 45.00 Begin abrupt ascent, bears E. and W.
- 47.00 Ridge, bears NW. and SE.
- Descend over rolling land.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone,

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

24 ins. in the ground, for cor. of secs. 26-27-34 and 35,  
marked T 22 S S 26 on NE.,

R 18 E S 35 on SE.,

S 34 on SW., and

S 27 on NW. face, with 1 notch on S. and 2 notches on  
E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist.,  
and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling and mountainous.

Soil, sandy loam, 1st. rate; clay, 3rd. rate.

No timber.

Mountainous land on 2.00 chs.

S.  $89^{\circ}58'E.$ , on a random line, bet. secs. 26 and 35.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.92 Intersect N. and S. line 12 lks. S. of the cor. of secs.  
25-26-35 and 36.

Thence I run

S.  $89^{\circ}57'W.$ , on a true line,

Bet. secs. 26 and 35.

Descend over rolling land, through dense undergrowth.

3.50 Hollow, 50 ft. deep, course S. Wash in hollow

Gradual ascent.

27.00 Spur, projects S.

Gradual descent.

39.96 Set a sandstone, 12x7x7 ins., 8 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W.  
of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft.  
base,  $1\frac{1}{2}$  ft. high, N. of cor.

Begin gradual ascent.

79.92 The cor. of secs. 26-27-34 and 35.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 79.92 chs.

N.0°01'W., bet. secs. 26 and 27.

Ascend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 27 on W. face, 26 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

63.00 Begin descent, Bears E. and W.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked T 22 S S 23 on NE.,

R 18 E S 26 on SE.,

S 27 on SW., and

S 22 on NW. face, with 2 notches on S. and E. edges, dig pits, 18x18x12 ins. in each sec., 5 1/2 ft. dist. and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

April 12 : At this cor. I set off 8°46'N., on decl. arc, and at 0h.01m., p.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38°53'N.

N.89°57'E., on a random line, bet. secs. 23 and 26.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.96 Intersect N. and S. line, 2.5 lks. N. of the cor. of secs. 23-24-25 and 26.

Thence I run

N.89°52'W., on a true line,

Bet. secs. 23 and 26.

Ascend through dense undergrowth.

2.00 Spur, projects S.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Descend.

16.50 Wash, 1.00 ch. wide, 10 ft. deep, course S.

Ascend.

Leave dense undergrowth, Bears N. and S.

39.98 Set a sandstone, 18x9x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

79.96 The cor. of secs. 22-23-26 and 27.

16-50  
63-45

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 16.50 chs.

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N.0°01'W., bet. secs. 22 and 23.

Descend over rolling land.

18.00 Wash, 1.00 ch. wide, 5 ft. deep, course NW.

40.00 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

73.00 Wash, 1.00 ch. wide, 10 ft. deep, course W.

80.00 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked with 3 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

S.89°52'E., on a random line, bet. secs. 14 and 23.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.00 Intersect N. and S. line, 28 lks. S. of the cor. of secs. 13-14-23 and 24.

Thence I run

S.89°56'W., on a true line,

Bet. secs. 14 and 23.

Descend over rolling land.

2.50 Road from Valley City, to Little Grande, bears NE. and SW.

9.50 Wash, 50 lks. wide, 5 ft. deep, course NW.

Ascend.

20.00 Begin descent.

40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 14 on N. face, 23 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

49.00 Begin ascent.

80.00 The cor. of secs. 14-15-22 and 23.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

April 12, 1908.

April 13 : At 8h. 01m., a.m., l.m.t., I set off 38°54'N., on lat. arc, 9°04'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 14-15-22 and 23.

Thence I run

N.0°01'W., bet. secs. 14 and 15.

Descend over rolling land.

15.00 Wash, 1.00 ch. wide, 5 ft. deep, course SW.

40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 15 on W.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- face, 14 on E. face, dig pits, 18x18x12 ins., N. and S., of post, 3 ft. dist, and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.
- 72.50 Road, from Valley City to Little Grande, bears NW. and SE.
- 80.00 Set a limestone, 15x10x5 ins., 10 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked with 4 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, rolling.
- Soil, clay, 2nd. rate.
- No timber.
- 
- N. 89°56'E., on a random line, bet. secs. 11 and 14.
- 40.00 Set temp. ¼ sec. cor.
- 80.02 Intersect N. and S. line, 9 lks. N. of the cor. of secs. 11-12-13 and 14.
- Thence I run
- West, on a true line,
- Bet. secs. 11 and 14.
- Ascend over rolling land.
- 17.00 Wash, 50 lks. wide, 5 ft. deep, course NW.
- 30.00 Wash, 50 lks. wide, 5 ft. deep, course NW.
- 40.01 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 11 on N. face, 14 on S face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
- 71.00 Wash, 50 lks. wide, 6 ft. deep, course NW.
- 80.02 The cor. of secs. 10-11-14 and 15.
- Land, rolling.
- Soil, clay, 2nd. rate.
- No timber
-

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

N.0°01'W., bet. secs. 10 and 11.

Descend over rolling land.

8.50 Wash, 50 lks. wide, 7 ft. deep, course NW.

36.50 Wash, 1.00 ch. wide, 20 ft. deep, course SW.

Ascend over broken clay land.

40.00 Set a sandstone, 18x9x9 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins, N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked with 5 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

43.50

36.50

Land, rolling and broken clay, mountainous.

Soil, clay, 2nd. and 3rd. rate.

No timber.

Mountainous land on 43.50 chs.

April 13: At this cor. I set off  $9^{\circ}07'N.$ , on decl. arc, and at 0h. 01m., p.m., 1.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}56'N.$

East, on a random line, bet. secs. 2 and 11.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect N. and S. line, 8 lks. S. of the cor. of secs. 1-2-11 and 12.

Thence I run

S.  $89^{\circ}57'W.$ , on a true line,

Bet. secs. 2 and 11.

Ascend over broken clay and mountainous land.

2.00 Spur, projects S.

Descend.

3.50 Head of hollow, course S.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- Ascend.
- 4.75 Spur, projects SW.  
Descend.
- 11.00 Hollow, 50 ft. deep, course SW.  
Ascend.
- 16.00 Spur, projects S.  
Descend.
- 20.00 Hollow, 60 ft. deep, course SE.  
Ascend.
- 22.00 Ridge, bears NE. and SW.  
Descend over broken clay land.
- 40.02 Set a sandstone, 20x12x5 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 55.00 Wash, 2.00 chs. wide, 10 ft. deep, course SW.  
Ascend.
- 63.00 Spur, projects SW.  
Descend.
- 80.04 The cor. of secs. 2-3-10 and 11.  
Land, mountainous.  
Soil clay, 3rd. rate.  
No timber.  
Mountainous land on 80.04 chs.
- 
- N.  $0^{\circ}01'W.$ , on a random line, bet. secs. 2 and 3.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 86.61 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 2-3-34 and 35, heretofore described.  
Thence I run  
S.  $0^{\circ}03'E.$ , on a true line,  
Bet. secs. 2 and 3.  
Ascend over mountainous land.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- 3.50 Ridge, bears NW. and SE.  
Descend.
- 4.90 Head of hollow, course NW.  
Ascend.
- 9.50 Ridge, bears NE. and SW.  
Abrupt descent.
- 11.00 Hollow, 50 ft. deep, course E.  
Ascend.
- 16.50 Spur, projects SE.  
Abrupt descent over broken land.
- 32.60 Telegraph line, bears N.  $64^{\circ}06'$  E. and S.  $64^{\circ}06'$  W.
- 33.45 Middle of track of Denver and Rio Grande Railroad, bears  
N.  $64^{\circ}06'$  E. and S.  $64^{\circ}06'$  W.  
Foot of abrupt descent, bears NE. and SW.  
Descend over rolling land, over broken clay hills.
- 46.61 Set a limestone, 20x12x9 ins., 15 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins.,  
N. and S. of stone, 3 ft. dist., and raise a mound of earth,  
 $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 52.10 Road, from Thompsons to Little Grande, bears E. and W.
- 86.61 The cor. of secs. 2-3-10 and 11.  
Land, mountainous.  
Soil, clay, 3rd. rate.  
No timber.  
Mountainous land on 86.61 chs.

April 13, 1908.

April 14 : At 8h.00m., a.m., l.m.t., I set off  $38^{\circ}51'$  N., on  
lat. arc,  $9^{\circ}26'$  N., on decl. arc, and determine a meridian with  
the solar, at the cor. of secs. 3-4-33 and 34, heretofore  
described on the S. bdy. of the Tp.,  
Thence I run

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

N.0°02'W., bet.secs.33 and 34.

Descend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 33 on W. and 34 on E. faces, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

43.00 Hollow, 50 ft. deep, course SE.

Ascend.

58.00 Ridge, bears NW. and SE.

Descend.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked T 22 S S 27 on NE.,

R 18 E S 34 on SE.,

S 33 on SW., and

S 28 on NW. face, with 1 notch on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling.

Soil, clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.00 chs.

S.89°58'E., on a random line, bet.secs.27 and 34.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 8 lks. S. of the cor. of secs. 26-27-34 and 35.

Thence I run

S.89°59'W., on a true line,

Bet.secs.27 and 34.

Ascend over rolling land, through dense undergrowth.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- 21.00 Ridge, bears NW. and SE.  
Descend.
- 39.99 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 27 on N. face, 34 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 78.75 Hollow, 50 ft. deep, course NW.  
Ascend.
- 79.98 The cor. of secs. 27-28-33 and 34.  
Land, rolling.  
Soil, clay, 2nd. rate.  
No timber.  
Undergrowth, sage and greasewood.  
Land, covered with dense undergrowth on 79.98 chs.
- 
- N.0°02'W., bet. secs. 27 and 28.
- Descend over rolling land, through dense undergrowth.
- 1.50 Hollow, 50 ft. deep, course NW.  
Ascend.
- 19.00 Ridge, bears NW. and SE.  
Descend.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 28 on W. face, 27 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 56.00 Hollow, 50 ft. deep, course NW.  
Ascend.
- 64.00 Ridge, bears NW. and SE.  
Descend.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked T 22 S S 22 on NE.

## SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS R 18 E S 27 on SE.,  
 S 28 on SW., and  
 S 21 on NW. face, with 2 notches on S. and 3 notches on  
 E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist.,  
 and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling.  
 Soil, clay, 2nd. rate.  
 No timber.  
 Undergrowth, sage and greasewood.  
 Land covered with dense undergrowth on 80.00 chs.  
 April 14: At this cor. I set off  $9^{\circ}29'N.$ , on decl. arc, and  
 at 12 M., l.m.t., observe the sun on the meridian, the  
 resulting lat. is  $38^{\circ}53'N.$

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N.  $89^{\circ}59'E.$ , on a random line, bet. secs. 22 and 27.  
 40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
 79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs.  
 22-23-26 and 27.  
 Thence I run  
 S.  $89^{\circ}58'W.$ , on a true line,  
 Bet. secs. 22 and 27.  
 Ascend over rolling land, through dense undergrowth.  
 39.98 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24  
 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 22 on N. face,  
 27 on S. face, dig pits, 18x18x12 ins., E. and W. of post., 3  
 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high,  
 N. of cor.  
 60.00 Ridge, bears N.W. and SE.  
 Descend.  
 68.00 Hollow, 50 ft. deep, course NW.  
 Ascend.  
 79.96 The cor. of secs. 21-22-27 and 28.  
 Land, rolling.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

Soil, clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land, covered with dense undergrowth on 79.96 chs.

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N.0°02'W., bet. secs. 21 and 22.

Descend over rolling land, through dense undergrowth.

9.00 Hollow, 50 ft. deep, course NW.

Ascend.

22.50 Ridge, bears NW. and SE.

Descend.

40.00 Set a sandstone, 18x6x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., N. and S. of stone, <sup>3 ft. dist</sup> and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

62.00 Wash, 1.00 ch. wide, 50 ft. deep, course W.

Ascend.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked T 22 S 15 on NE.,

R 18 E S 22 on SE.,

S 21 on SW., and

S 16 on NW. face, with 3 notches on S. and E. edges, and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.00 chs.

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N.89°58'E., on a random line, bet. secs. 15 and 22.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.90 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 14-15-22 and 23.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Thence I run

S.89°57'W., on a true line,

Bet. secs. 15 and 22.

Descend over rolling land, through dense undergrowth.

13.00 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

39.50 Wash, 50 lks. wide, 6 ft. deep, course SW.

39.95 Set a sandstone, 20x7x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

79.90 The cor. of secs. 15-16-21 and 22.

Land, rolling.

Soil, clay loam, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 79.90 chs.

April 14, 1908.

April 15 : At 8h. 0m., a.m., l.m.t., I set off 38°54'N., on lat. arc, 9°48'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 15-16-21 and 22.

Thence I run

N.0°02'W., bet. secs. 15 and 16.

Ascend over rolling land, through sparse brush.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 16 on W. face, 15 on E. face, dig pits, 18x18x12 ins., N. and S. of post., 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

45.00 Begin descend.

67.50 Wash, 1.00 ch. wide, 15 ft. deep, in hollow, 100 ft. deep, course SW.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Ascend.

80.00 Set a flint stone, 12x12x8 ins., 8 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

Land, rolling.

Soil, clay, 3rd. rate.

No timber.

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N. 89°57'E., on a random line, bet. secs. 10 and 15.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 10-11-14 and 15.

Thence I run

S. 89°54'W., on a true line,

Bet. secs. 10 and 15.

Descend over broken clay hills.

8.00 Road, from Valley City, to Little Grande, bears NW. and SE.

24.00 Hollow, 75 ft. deep, course NW.

Ascend.

33.60 Ridge, bears NW. and SE.

Descend.

40.02 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

42.25 Hollow, 50 ft. deep, course NW.

Ascend.

50.00 Ridge, bears NW. and SE.

Abrupt descent.

69.75 Wash, 1.00 ch. wide, 20 ft. deep, in hollow, 100 ft. deep, course SW.

Ascend.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

80.04 The cor. of secs. 9-10-15 and 16.

19.75

Land, broken clay hills and mountainous.

60.29

Soil, clay, 2nd. and 3rd. rate.

No timber.

Mountainous land on 19.75 chs.

N.0°02'W., bet. secs. 9 and 10.

Ascend over rolling gravelly land.

40:00 Set a sandstone, 15x15x12 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Over sandy land.

51.50 Road from Valley City to Little Grande, bears NW. and SE.

80.00 Set a flint stone, 12x8x6 ins., 8 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked with 5 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, gravelly and sandy, 2nd. rate.

No timber.

N.89°54'E., on a random line, bet. secs. 3 and 10.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.88 Intersect N. and S. line, 28 lks. N. of the cor. of secs.

2-3-10 and 11.

Thence I run

N.89°54'W., on a true line,

Bet. secs. 3 and 10.

Descend over rolling sandy land.

1.25 Wash, 30 lks. wide, 3 ft. deep, course SW.

39.94 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 3 on N. face, 10 on S. face, dig pits, 18x18x12 ins., E. and W. of post, <sup>off. dist.</sup> and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

79.88 The cor. of secs. 3-4-9 and 10.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

April 15, : At this cor. I set off  $9^{\circ}51'N.$ , on decl. arc, and at 12M., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}56'N.$

N.  $0^{\circ}02'W.$ , on a random line, bet. secs. 3 and 4.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

86.69 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 3-4-33 and 34, heretofore described.

Thence I run

S.  $0^{\circ}04'E.$ , on a true line,

Bet. secs. 3 and 4.

Ascend over mountainous land.

3.20 Spur, projects E.

Abrupt descent over rocky land.

5.00 Enter bottom of wide hollow, 100 ft. deep, course SW.

Enter dense undergrowth.

7.50 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

20.50 Leave hollow, and dense undergrowth, bears NE. and SW.

Abrupt ascent.

42.35 Spur, projects W.

Abrupt descent.

46.69 Set a limestone, 15x14x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

From this cor. the semaphore on top of Little Grande depot, on the Denver and Rio Grande Railroad, bears S. 61° 45' W.

64.25 Telegraph line, bears NW. and SE.

64.95 Middle of track of the Denver and Rio Grande Railroad, on short tangent between two curves, course of tangent N. 83° 10' W. and S. 83° 10' E.

Foot of abrupt descent, bears NW. and SE.

Descend over rolling land.

81.15 Road from Thompsons to Little Grande, bears E. and W.

86.69 The cor. of secs. 3-4-9 and 10.

64.95  
21.74

From this cor. the same semaphore on Little Grande station bears N. 41° 12' W.

Land, mountainous and rolling.

Soil, rocky and clay, 3rd. rate. sandy, 2nd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or

mountainous land on 64.95 chs.

April 15, 1908.

April 16 : At 8h. 0m., a.m., l.m.t., I set off 38° 51' N., on lat. arc, 10° 09' N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 4-5-32 and 33, heretofore described on the S. bdy. of the Tp.

Thence I run

N. 0° 03' W., bet. secs. 32 and 33.

Gradual ascent, through dense undergrowth.

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

44.00 Begin abrupt ascent, bears NW. and SE.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

- 50.00 Top of ridge, bears NW. and SE.  
Descend over rolling land.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked T 22 S S 28 on NE.,  
R 18 E S 33 on SE.,  
S 32 on SW., and  
S 29 on NW. face, with 1 notch on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling and mountainous.  
Soil, sandy loam, 1st. rate : clay, 3rd. rate.  
No timber.  
Undergrowth, sage and greasewood.  
Land covered with dense undergrowth or mountainous land on 80.00 chs.
- 
- S.  $89^{\circ}58'$  E., on a random line, bet. secs. 28 and 33.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.98 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 27-28-33 and 34.  
Thence I run  
N.  $89^{\circ}56'$  W., on a true line,  
Bet. secs. 28 and 33.  
Ascend over rolling land, through dense undergrowth.
- 25.00 Ridge, bears NW. and SE.  
Descend.
- 38.50 Hollow, 50 ft. deep, course SE.  
Ascend.
- 39.99 Set a sandstone, 16x8x8 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

- 79.98 The cor. of secs. 28-29-32 and 33.  
Land, rolling.  
Soil, clay, 3rd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 79.98 chs.  
  

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N.0°03'W., bet. secs. 28 and 29.

Descend over rolling land, through dense undergrowth.
- 32.00 Hollow, 75 ft. deep, course SE.  
Abrupt ascent.
- 36.00 Ridge, bears NW. and SE.  
Descend.
- 40.00 Set a sandstone, 15x6x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a sandstone, 22x12x3 ins., 16 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked with 2 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.  
Soil, clay, 3rd. rate.  
No timber.  
Undergrowth, sage and greasewood.  
Land covered with dense undergrowth on 80.00 chs.  
April 16 : At this cor. I set off 10°12' N., on decl. arc, and at 12M., l.m.t., observe the sun on the meridian, the resulting lat. is 38°53' N.  
  

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S.89°56'E., on a random line, bet. secs. 21 and 28.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

21-22-27 and 28.

Thence I run

N. 89° 57' W., on a true line,

bet. secs. 21 and 28.

Ascend over rolling land, through dense undergrowth.

17.00 Ridge, bears NW. and SE.

Descend.

33.00 Hollow, 75 ft. deep, course NW.

Ascend.

39.98 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 21 on N. face, 28 on S. face, dig pits, 18x18x12 ins., E. and W. of post., 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

55.00 Ridge, bears NW. and SE.

Descend.

65.00 Hollow, 75 ft. deep, course NW.

Ascend.

79.96 The cor. of secs. 20-21-28 and 29.

Land, rolling.

Soil, clay, 3rd. rate.

No timber.

Undergrowth; sage and greasewood.

Land, covered with dense undergrowth on 79.96 cha.

N. 0° 03' W., bet. secs. 20 and 21.

Descend over rolling land, through dense undergrowth.

49.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 20 on W. face, 21 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, E. of cor.

55.00 Wash, 2.53 cha. wide, 10 ft. deep, course SE. In broad hollow.

Ascend.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked T 22 S S 16 on NE.,  
R 18 E S 21 on SE.,  
S 20 on SW., and  
S 17 on NW. face, with 3 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling.  
Soil, clay, 3rd. rate: sandy, 2nd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land, covered with dense undergrowth on 80.00 chs.
- 
- S. 89°57'E., on a random line, bet. secs. 16 and 21.
- 40.00 Set temp. ¼ sec. cor.
- 79.94 Intersect N. and S. line, 15 lks. S. of the cor. of secs. 15-16-21 and 22.  
Thence I run  
S. 89°57'W., on a true line,  
Bet. secs. 16 and 21.  
Descend over rolling land, through dense undergrowth.
- 39.97 Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
- 50.00 Enter wash, 6 ft. deep, course SW.
- 55.00 Leave wash.  
Ascend.
- 79.94 The cor. of secs. 16-17-20 and 21.  
Land, rolling.  
Soil, sandy, 2nd. rate.  
No timber.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 79.94 chs.

April 16, 1908

April 18 : At 7h.59m., a.m., l.m.t., I set off  $38^{\circ}54'N.$ , on lat. arc,  $10^{\circ}51'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 16-17-20 and 21.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 16 and 17.

Ascend abruptly over broken clay land.

1.80 Road, bears NE. and SW.

22.80 Top of abrupt ascent, bears NE. and SW.

Descend over rolling land, through dense undergrowth.

40.00 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 18x6x5 ins., 12 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked with 4 notches on S. and E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, mountainous and rolling.

Soil, clay, 3rd. rate. : sandy, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

$N.89^{\circ}57'E.$ , on a random line, bet. secs. 9 and 16.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.90 Intersect N. and S. line, 15 lks. N. of the cor. of secs. 9-10-15 and 16.

Thence I run

$N.89^{\circ}57'W.$ , on a true line,

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Bet.secs.9 and 16.

Ascend abruptly over rocky land.

2.00 Spur, projects S.

Abrupt descent.

6.60 Hollow, 75 ft. deep, course S.

Abrupt ascent.

19.00 Top of abrupt ascent, bears NE. and SW.

Gradual descent over rolling land, through dense undergrowth.

39.95 Set a sandstone, 16x7x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

55.50 Road, bears NE. and SW.

79.90 The cor. of secs. 8-9-16 and 17.

Land, mountainous and rolling.

Soil, rocky, 3rd. rate.; sandy, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or mountainous land on 79.90 chs.

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 N.0°03'W., bet.secs.8 and 9.

Ascend over rolling land, through dense undergrowth.

24.00 Enter wash, 8 ft. deep, course SW.

35.00 Leave wash.

40.00 Set a sandstone, 16x12x4 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

78.90 Road from Greenriver to Little Grande, bears E. and W.

79.40 S. edge of wash, 15 ft. deep, course NW.

80.00 N. edge of wash, course NW.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Set a sandstone, 24x12x10 ins., 18 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.00 chs.

April 18 : At this cor. I set off  $10^{\circ}54'N.$ , on decl. arc, and at 11h. 59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}56'N.$

S.  $89^{\circ}57'E.$ , on a random line, bet. secs. 4 and 9.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.82 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 3-4-9 and 10.

Thence I run

N.  $89^{\circ}58'W.$ , on a true line,

Bet. secs. 4 and 9.

Over rolling land.

24.30 Road from Valley City to Little Grande, bears NW. and SE.

31.40 Road, bears N. and S.

35.60 Spur, of Denver and Rio Grande Railroad, bears N.  $15^{\circ}17'E.$  and S.  $15^{\circ}17'W.$

35.92 Intersect line 3-4, Survey No. 5844, Lorna Doone Placer, S.  $15^{\circ}17'W.$ , 28.59 chs. from cor. No. 3, which is a pine post, 6x6 ins. sq., 18 ins. above the ground, scribed 3-5844 and 11.39 chs. N.  $15^{\circ}17'E.$ , from cor. No. 4, which is a pine post, 6x6 ins. sq., 18 ins. above the ground, scribed 4-5844. Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for closing cor. of secs. 4 and 9,

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

marked C C T 22 S R 18 E on E.,  
 S 4 on N., and  
 S 9 on S. face, with 5 grooves  
 on S. face, dig pits, 24x18x12 ins., crosswise on each line,  
 N. and S. 3 ft., and E. of post, 7 ft. dist., and raise a mound  
 of earth, 4 ft. base, 2 ft. high, E. of cor.

39.91 Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for  
 $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins.,  
 E. and W. of stone, 3 ft. dist., and raise a mound of earth,  
 $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

61.83 Intersect line 1-2, Survey No. 5844, Lorna Doone Placer,  
 S.  $15^{\circ}17'W.$ , 35.38 chs. from cor. No. 2, which is a pine post,  
 4x6 ins. sq., 18 ins. above the ground, scribed 2-5844, and  
 N.  $15^{\circ}17'E.$ , 4.60 chs. from cor. No. 1, which is identical  
 with U.S.L.M. No. 238 and is a pine post, 6x6 ins.,  
 4 ft. above the ground, scribed 1-5844, U.S.L.M. No. 238.  
 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone,  
 24 ins. in the ground, for closing cor. of secs. 4 and 9,  
 marked C C T 22 S R 18 E on W.,

S 4 on N., and

S 9 on S. face, with 5 grooves on  
 S face, dig pits, 24x18x12 ins., crosswise on each line,  
 N. and S. 3 ft. and W. of post, 7 ft. dist., and raise a mound  
 of earth, 4 ft. base, 2 ft. high, W. of cor.

63.05 Road, bears NE. and SW.

77.00 Enter wash, 10 ft. deep, course SW.

79.82 W. edge of wash.

The cor. of secs. 4-5-8 and 9.

Land, rolling.

Soil, sandy and gravelly, 2nd. rate.

No timber

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

N.0°03'W., on a random line, bet. secs. 4 and 5.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

86.74 Intersect N. bdy. of Tp., 3 lks. W. of the cor. of secs. 4-5-32 and 33, heretofore described.

Thence I run

S.0°02'E., on a true line,

Bet. secs. 4 and 5.

Descend over rolling land, through dense undergrowth.

42.90 Telegraph line, bears N.74°44'W. and S.74°44'E.

43.64 Middle of track of Denver and Rio Grande Railroad, bears N.74°44'W. and S.74°44'E.

46.74 Set a sandstone, 18x6x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

50.75 Hollow, 75 ft. deep, course W.

Ascend.

63.70 Ridge, bears E. and W.

Descend.

86.74 The cor. of secs. 4-5-8 and 9.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 86.74 chs.

April 18, 1908.

April 20 : At 7h.59m., a.m., l.m.t., I set off 38°51'N., on lat. arc, 11°33'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 5-6-31 and 32, heretofore described on the S. bdy. of the Tp.

Thence I run

N.0°03'W., bet. secs. 31 and 32.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Descend over rocky land, through dense undergrowth.

2.00 Hollow, 75 ft. deep, course NW.

Ascend.

6.00 Wash, 50 ft. wide, 5 ft. deep, course W.

17.75 Wash, 50 ft. wide, 5 ft. deep, course W.

Begin abrupt ascent, bears NW. and SE.

21.50 Ridge, bears NW. and SE.

Descend over rolling land.

40.00 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

43.00 Wash, 1.00 ch. wide, 8 ft. deep, course SW.

Ascend.

64.00 Road, bears NE. and SW.

80.00 Set a sandstone, 24x5x5 ins., 18 ins. in the ground, for cor. of secs. 29-30-31 and 32, marked with 1 notch on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling and mountainous.

Soil, rocky and clay, 3rd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

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S. 89° 58' E., on a random line, bet. secs. 29 and 32.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.08 Intersect N. and S. line, at the cor. of secs. 28-29-32 and 33.

Thence I run

N. 89° 58' W., on a true line,

Bet. secs. 29 and 32.

Ascend over rolling land, through dense undergrowth.

## SUBDIVISIONS OF T.22 S. R.18 E.

## CHAINS

- 35.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 40.04 Set a sandstone, 16x10x4 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 41.00 Foot of abrupt descent, bears NW. and SE.  
Descend over rolling land.
- 60.00 Wash, 30 lks. wide, 7 ft. deep, course SW.
- 69.50 Road, bears NE. and SW.
- 80.08 The cor. of secs. 29-30-31 and 32.  
Land, rolling and mountainous.  
Soil, clay, 3rd. rate.  
No timber.  
Undergrowth, sage and greasewood.  
Land covered with dense undergrowth or mountainous land on 80.08 chs.
- 
- N. 89°58' W., on a random line, bet. secs. 30 and 31.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 78.17 Intersect W. bdy. of Tp., 5 lks. S. of the cor. of secs. 25-30-31 and 36, which is a sandstone, 8x8x6 ins. above ground, marked and witnessed as described by the surveyor general.  
Thence I run  
S. 89°56' E., on a true line,  
Bet. secs. 30 and 31.  
Ascend over rocky land, through dense undergrowth.
- 7.00 Spur, projects NE.  
Descend.
- 11.00 Hollow, 50 ft. deep, course NE.  
Ascend.
- 12.40 Spur, projects N.  
Descend.

## SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS	
14.50	Hollow, 50 ft. deep, course N. Ascend.
16.40	Spur, projects N. Descend.
21.00	Hollow, 50 ft. deep, course NW. Ascend.
38.17	Set a sandstone, 18x6x5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
78.17	The cor. of secs. 29-30-31 and 32. Land, rolling. Soil, rocky and clay, 3rd. rate. No timber. Undergrowth, sage and greasewood. Land covered with dense undergrowth on 78.17 chs. April 20 : At this cor. I set off 11°35'N., on decl. arc, and at 11h.59m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38°52'N.
	N. 0°03'W., bet. secs. 29 and 30.
	Ascend over rolling land, through dense undergrowth.
16.00	Begin abrupt ascent, bears NW. and SE.
22.00	Ridge, bears NW. and SE. Descend over rolling land.
40.00	Set a limestone, 24x14x3 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
80.00	Set a limestone, 16x12x3 ins., 11 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked with 2 notches on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Land, rolling and mountainous.

Soil, clay, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

S.  $89^{\circ}58'E.$ , on a random line, bet. secs. 20 and 29.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 20-21-28 and 29.

Thence I run

N.  $89^{\circ}59'W.$ , on a true line,

Bet. secs. 20 and 29.

Ascend over broken and mountainous land.

13.00 Spur, projects N.

Descend.

22.00 Hollow, 75 ft. deep, course N.

Ascend.

33.00 Road, bears NE. and SW.

37.00 Spur, projects N.

Descend.

40.01 Set a limestone, 18x6x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

43.00 Hollow, 75 ft. deep, course N.

Ascend.

60.00 Ridge, bears NW. and SE.

Descend.

67.00 Enter hollow, 75 ft. deep, course NW.

68.00 Wash, 50 lks. wide, 10 ft. deep, course NW.

70.00 Wash, 30 lks. wide, 6 ft. deep, course NW.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

- 71.00 Leave hollow, course NW.  
Ascend.
- 75.00 Spur, projects NW.  
Descend.
- 80.02 The cor. of secs. 19-20-29 and 30.  
Land, mountainous.  
Soil, clay, 3rd. rate.  
No timber.  
Mountainous land on 80.02 chs.  
  
N. 89° 56' W., on a random line, bet. secs. 19 and 30.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 78.10 Intersect W. bdy. of Tp., 5 lks. N. of the cor. of secs.  
19-24-25 and 30, which is a sandstone, 15x6x3 ins. above  
ground, marked and witnessed as described by the surveyor  
general.  
Thence I run  
S. 89° 58' E., on a true line,  
Bet. secs. 19 and 30.  
Descend over rocky and mountainous land, through dense  
undergrowth.
- 3.00 Hollow, 75 ft. deep, course NE.  
Ascend.
- 32.00 Ridge, bears NW. and SE.  
Descend over rolling land.
- 38.10 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone,  
24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 19 on N.  
face, 30 on S. face, dig pits, 18x18x12 ins., E. and W. of post,  
3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft.  
high, N. of cor.
- 78.10 The cor. of secs. 19-20-29 and 30.  
Land, mountainous and rolling.  
Soil, rocky and clay, 3rd. rate.  
No timber.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or mountainous land on 78.10 chs.

April 20, 1908.

April 21 : At 7h.59m., a.m., l.m.t, I set off  $38^{\circ}53'N.$ , on lat. arc,  $11^{\circ}53'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 19-20-29 and 30.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 19 and 20.

Descend abruptly over broken land.

13.00 Enter hollow, 100 ft. deep, course NW.

17.00 Leave hollow.

Abrupt ascent.

22.00 Spur, projects W.

Abrupt descent.

34.00 Enter bottom of hollow, 100 ft. deep, course W.

Enter dense undergrowth.

40.00 Set a sandstone,  $24 \times 12 \times 5$  ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

50.75 Leave hollow, course W.

Ascend over rolling land.

80.00 Set a sandstone,  $15 \times 10 \times 4$  ins., 10 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked with 3 notches on S. and 5 notches on E. edges, dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling and mountainous.

Soil clay, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Land covered with dense undergrowth or mountainous land on 80.00 chs.

S. 89° 59' E., on a random line, bet. secs. 17 and 20.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 16-17-20 and 21.

Thence I run

West, on a true line,

Bet. secs. 17 and 20.

Descend over broken clay land, mountainous.

1.00 Road, bears NE. and SW.

40.02 Set a sandstone, 18x6 x 5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

56.00 Enter bottom of hollow, 100 ft. deep, course SW.

Enter dense undergrowth.

66.00 Leave hollow, course SW.

Ascend over rolling land.

80.04 The cor. of secs. 17-18-19 and 20.

Land, mountainous and rolling.

Soil, clay, 3rd. rate. sandy, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.04 chs.

N. 89° 58' W., on a random line, bet. secs. 18 and 19.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

78.04 Intersect W. bdy. of Tp., 5 lks. S. of the cor. of secs.

13-18-19 and 24, which is a limestone, 12x6x5 ins. above ground, marked and witnessed as described by the surveyor general.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Thence I run

S.  $89^{\circ}56'E.$ , on a true line,

Bet. secs. 18 and 19.

Descend through dense undergrowth.

3.00 Hollow, 50 ft. deep, course SE.

Ascend.

15.00 Begin descent.

16.10 Hollow 50 ft. deep, course S.

Ascend.

38.01 Set a sandstone, 20x6x5 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

42.00 Spur, projects S.

Descend.

78.01 The cor. of secs. 17-18-19 and 20.

Land, rolling.

Soil, clay, 3<sup>rd</sup>. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 78.01 chs.

April 21 : At this cor. I set off  $11^{\circ}56'N.$ , on decl. arc, and at 11h. 59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}54'N.$

---

N.  $0^{\circ}03'W.$ , bet. secs. 17 and 18.

Ascend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 18 on W. face, 17 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a limestone, 24x6x5 ins., 18 ins. in the ground, for cor.

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

of secs. 7-8-17 and 18, marked with 4 notches on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.00 chs.

East, on a random line, bet. secs. 8 and 17.

40.00 Set temp. ¼ sec. cor.

80.12 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 8-9-16 and 17.

Thence I run

S. 89° 58' W., on a true line, bet. secs. 8 and 17.

Descend over rolling land, through dense undergrowth.

14.00 Enter bottom of hollow, 75 ft. deep, course SW.

23.00 Leave hollow.

Ascend.

40.06 Set a redwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 8 on N. face, and 17 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

80.12 The cor. of secs. 7-8-17 and 18.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Dense undergrowth on 80.12 chs.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

N.89°56'W., on a random line, bet. secs. 7 and 18.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

77.91 Intersect W. bdy. of Tp., 12 lks. N. of the cor. of secs.

7-12-13 and 18, which is a pine post, 4 ins. sq., 12 ins.

above the ground, marked and witnessed as described by the surveyor general.

Thence I run

N.89°59'E., on a true line,

Bet. secs. 7 and 18.

Ascend over rolling land, through dense undergrowth.

37.91 Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

77.91 The cor. of secs. 7-8-17 and 18.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 77.91 chs.

April 21, 1908.

April 22 : At 7h.59m., a.m., l.m.t., I set off 38°55'N., on 1st. arc, 12°13'N., on decl. arc, and determine a meridian with the solar at the cor. of secs. 7-8-17 and 18.

Thence I run

N.0°03'W., bet. secs. 7 and 8.

Ascend over rolling land, through dense undergrowth.

22.00 Descend.

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

## SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS	
44.50	Hollow, 75. ft. deep, course SW. Ascend.
51.00	Ridge, bears NW. and SW. Descend.
66.00	Hollow, 75 ft. deep, course SW. Ascend.
76.00	Begin descent.
80.00	Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked with 5 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, rolling. Soil, sandy, 2nd. rate. No timber. Undergrowth, sage and greasewood. Land covered with dense undergrowth on 80.00 chs.
	N. 89°58'E., on a random line, bet. secs. 5 and 8.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 4-5-8 and 9. Thence I run S. 89°57'W., on a true line Bet. secs. 5 and 8.
	Cross wash.
1.00	W. edge of wash, 10 ft. deep, course NW.
4.00	Same wash, 1.00 ch. wide, 10. ft. deep, course SW. Over rolling land, descend through dense undergrowth.
6.50	Road, bears NW. and SE.
39.99	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 5 on N. face, 8 on S face, dig pits, 18x18x12 ins., E. and W. of post,

SUBDIVISIONS OF T.22 S., R.18 E.

CHAINS

3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

79.98 The cor. of secs. 5-6-7 and 8.

Land, rolling, and cut by washes, mountainous.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or mountainous land on 79.98 chs.

S. 89° 59' W., on a true line, bet. secs. 6 and 7.

40.00 Set temp. ¼ sec. cor.

77.71 Intersect W. bdy. of Tp., 5 lks. N. of the cor. of secs. 1-6-7-and 12, which is a sandstone, 6x6x6 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

N. 89° 57' E., on a true line,

Bet. secs. 6 and 7.

Ascend along steep south slope over broken and mountainous land.

25.50 Spur, projects S.

Descend along steep south slope.

37.71 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

49.50 Enter hollow, 100 ft. deep, course from E. to SW.

Ascend along bottom of hollow.

71.00 Leave hollow, course from NE. to W.

Abrupt ascent.

77.71 The cor. of secs. 5-6-7 and 8.

Land, mountainous.

## SUBDIVISIONS OF T.22 S., R.18 E.

## CHAINS

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 77.71 chs.

April 22 : At this cor. I set off  $12^{\circ}16'N.$ , on decl. arc, and at 11h.59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}56'N.$

$N.0^{\circ}03'W.$ , on a random line, bet. secs. 5 and 6.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

86.66 Intersect N. bdy. of Tp., 5 lks. W. of the cor. of secs. 5-6-31 and 32, heretofore described.

Thence I run

$S.0^{\circ}01'E.$ , on a true line,

Bet. secs. 5 and 6.

Descend through dense undergrowth.

24.00 Begin abrupt descent, bears NE. and SW.

24.50 Enter bottom of hollow, 100 ft. deep, course SW.

30.00 Wash, 30 lks. wide, 10 ft. deep, course SW.

33.00 Leave hollow, abrupt ascent.

33.75 Top of abrupt ascent, bears NE. and SW.

Gradual descent.

46.66 Set a sandstone,  $20 \times 14 \times 3$  ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

70.50 Road, from Greenriver to Little Grande, bears E. and W.

78.50 Begin abrupt descent, bears NE. and SW.

83.50 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

86.66 The cor. of secs. 5-6-7 and 8.

Land, mountainous and rolling.

Soil, sandy, 2nd. rate ; rocky, 3rd. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.18 E.

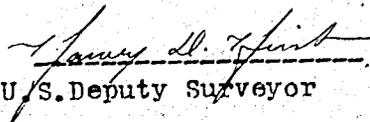
## CHAINS

Undergrowth, sage and greasewood.  
Land covered with dense undergrowth or  
Mountainous land on 86.66 chs.

April 22, 1908

## GENERAL DESCRIPTION.

This township is rolling in the central and north-eastern portions, while the balance is clay hills. The soil of the rolling portion is sandy or clay loam, capable of producing crops with irrigation, while the balance is generally clay, unfit for agriculture but supporting a growth of undergrowth, which is utilized for a winter range for sheep and cattle. There is no timber growing on this township. There is no mineral found in this township, the placer claim in secs. 4 and 9 is a gravel placer, the gravel being used for railroad ballast and other purposes. There is no surface water in this township. Little Grande, a flag station on the Denver and Rio Grande Railroad is located in SW $\frac{1}{4}$  of sec. 4, it consists of a depot and 3 houses for the section hands. There are no settlers in this township.

  
U. S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by \_\_\_\_\_

\_\_\_\_\_, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of \_\_\_\_\_

showing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "L", Chainman.

T. B. S., R. O. H. \_\_\_\_\_, Chainman.

\_\_\_\_\_, Moundman.

\_\_\_\_\_, Moundman.

\_\_\_\_\_, Axman.

\_\_\_\_\_, Axman.

\_\_\_\_\_, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted \_\_\_\_\_

\_\_\_\_\_, United States Deputy Surveyor, in surveying all those parts or portions of the \_\_\_\_\_

\_\_\_\_\_ of the \_\_\_\_\_

\_\_\_\_\_ meridian, \_\_\_\_\_ of \_\_\_\_\_, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for \_\_\_\_\_

\_\_\_\_\_, Chainman.

\_\_\_\_\_, Chainman.

\_\_\_\_\_, Moundman.

\_\_\_\_\_, Moundman.

\_\_\_\_\_, Axman.

\_\_\_\_\_, Axman.

\_\_\_\_\_, Flagman.

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, \_\_\_\_\_, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from \_\_\_\_\_, United States Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 190\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final affidavit see book "L" T. 23 S., R. 20 E.

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 190\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL.

Salt Lake City, Utah, April 30, 190\_\_\_\_

The foregoing field notes of the survey of \_\_\_\_\_ the subdivisional lines of Township No. 23 South, Range No. 20 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey E. Hoist and Job H. Winwood under ~~his~~ their contract No. 298, dated March 21, 190\_\_\_\_, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*Thomas Hill*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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4-679.

" I "

BOOK A-349

FILED  
AUG 21 1908  
*MSB*

# FIELD NOTES

OF THE SURVEY OF THE

S. U. B. D. I. V. I. S. I. O. N. S.

of

Township No. 22 South,

Range No. 19 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors,

their

Under his Contract No. 298, dated March 21, 1907.

Survey commenced April 23, 1908

Survey completed May 5, 1908

6-161

high 35-63-38  
low 25-49-14

Meanders high 43  
low 2-27

NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton ..... Chairman

Walter A. Stumm, ..... "

Earl Woolley, ..... Moundman

Homer Petty, ..... "

Claude L. Heist, ..... Axman

Charlie Stumm, ..... Flagman

For preliminary affidavits see book "G" T. 23 S., R. 18 E.

BOOK A-349

INDEX DIAGRAM.

Township 22 South, Range 19 East.

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31	38	32	30	33	21	34	11	35	2	36

Meanders Page 49, 50, 51, 52

PRELIMINARY OATHS OF ASSISTANTS.

WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Chainman.*  
\_\_\_\_\_, *Chainman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Moundman.*  
\_\_\_\_\_, *Moundman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Axman.*  
\_\_\_\_\_, *Axman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



I, \_\_\_\_\_, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Flagman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



## SUBDIVISIONS OF T.22 S., R.19 E.

Survey commenced, April 23, 1908, and executed with the instrument described in book "A", of this survey. I examine the adjustments of the transit and correct the level and collimation errors, then to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described, in approximate latitude,  $38^{\circ}51'N.$ , longitude  $109^{\circ}47'W.$ , I set off  $38^{\circ}51'N.$ , on lat. arc,  $12^{\circ}40'N.$ , on decl. arc, and at 3h.58m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof on a stone, firmly set in the ground, 5 chs. N. of the cor.

At 1h.18m., p.m., l.m.t., I observe Polaris at lower culmination, in accordance with Manual of Instructions, and mark a point in the line thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins. east of the mark determined by the solar.

April 23, 1908.

April 24 : At 7 h.58m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $12^{\circ}53'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone, already set 5 chs. N. of my station, this mark falls 0.4 ins. east of the meridian established by the Polaris observation.

The solar apparatus by p.m. and a.m. observations, defines positions for meridians, respectively about  $0'21''$  west and east of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.15m., a.m., is  $N.15^{\circ}55'W.$ , the angle thus determined gives the

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

mag. decl.  $15^{\circ}55'E$ .

From the cor. of secs. 1-2-35 and 36, heretofore described

I run

$N.0^{\circ}01'W.$ , bet. secs. 35 and 36.

Ascend abruptly over rocky and mountainous land.

5.15 Ridge, bears NW. and SE.

Abrupt descent.

12.00 Hollow, 100 ft. deep, course SE.

Abrupt ascent.

Enter scattering timber.

31.70 Spur, projects SW.

Descend over sandstone boulders.

36.00 Hollow, 75 ft. deep, course SW.

Ascend over sandstone boulders.

40.00 Set a sandstone,  $15 \times 10 \times 10$  ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

65.50 Sandstone ridge, bears NW. and SE.

Abrupt descent over sandstone ledges.

78.50 Hollow, 400 ft. below top of ridge, course NW.

Ascend.

80.00 Set a sandstone,  $18 \times 12 \times 4$  ins., 12 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked with 1 notch on S. and E. edges, from which

A cedar, 8 ins. diam., bears  $N.68^{\circ}E.$ , 51 lks. dist., marked T 22 S R 19 E S 25 BT.

A cedar, 10 ins. diam., bears  $S.10^{\circ}E.$ , 50 lks. dist., marked T 22 S R 19 E S 36 BT.

A cedar, 13 ins. diam., bears  $S.29^{\circ}W.$ , 80 lks. dist., marked T 22 S R 19 E S 35 BT.

A cedar, 12 ins. diam., bears  $N.49^{\circ}W.$ , 81 lks. dist., marked T 22 S R 19 E S 26 BT.

Land, mountainous.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

East, on a random line, bet. secs. 25 and 36.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs.  
25-30-31 and 36, heretofore described.

Thence I run

S.  $89^{\circ}58'W.$ , on a true line, bet. secs. 25 and 36.

Ascend over rolling land, through dense undergrowth.

40.03 Set a sandstone, 12x10x6 ins., 8 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

52.00 Road, bears NW. and SE.

66.00 Begin abrupt ascent over sandstone ledges, bearing NW. and  
SE.

Enter scattering cedar and pinon timber.

71.60 Rocky spur, projects N.

Abrupt descent.

73.00 Hollow, 100 ft. deep, course NE.

Abrupt ascent.

78.60 Rocky spur, projects NW.

Abrupt descent.

80.06 The cor. of secs. 25-26-35 and 36.

Land, mountainous and rolling.

Soil, sandy, 3rd. rate ; rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Undergrowth, greasewood.

Land covered with dense undergrowth or  
mountainous land on 80.06 chs.

April 24 : At this cor. I set off  $12^{\circ}56'N.$ , on decl. arc,

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

and at 11h.58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°52' N.

N.0°01'W., bet. secs. 25 and 26.

Ascend over rocky and mountainous land.

1.40 Rocky spur, projects NW.

Abrupt descent

12.75 Leave mountainous land, bears NW. and SE.

Descend over rolling land, through dense undergrowth.

18.00 Road, bears NW. and SE.

40.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

50.00 Enter level land.

60.00 Wash, 10 lks. wide, 3 ft. deep, course SW.

80.00 Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked with 2 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous, rolling and level.

Soil, rocky, 3rd. and 4th. rate; sandy, 2nd. rate, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

N.89°58'E., on a random line, bet. secs. 24 and 25.

40.00 Set temp. 1/4 sec. cor.

80.02 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs. 19-24-25 and 30, heretofore described.

Thence I run

S.89°56'W., on a true line, bet. secs. 24 and 25

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Gradual descent .

40.01 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N of cor.

48.50 Wash, 25 lks. wide, 10 ft. deep, course SW.

80.02 The cor. of secs. 23-24-25 and 26.

Land, sloping west.

Soil, clay loam, 1st. rate.

No timber.

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N.0°01'W., bet. secs. 23 and 24.

Ascend over rolling land.

20.00 Ridge, bears NW. and SE.

Descend.

40.00 Set a lava stone, 18x10x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

51.00 Hollow, 50 ft. deep, course SW.

Abrupt ascent.

60.00 Ridge, bears NE. and SW.

Descend.

61.25 Hollow, 50 ft. deep, course SW.

Ascend.

63.10 Spur, projects SW.

Descend.

76.50 Hollow, 75 ft. deep, course SW.

Ascend.

79.00 Spur, projects W.

Descend.

80.00 Set a redwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 13-14-23 and 24,

29

51

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

marked T 22 S S 13 on NE.

R 19 E S 24 on SE.,

S 23 on SW., and

S 14 on NW. face, with 3 grooves on S. and 1 groove on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling and mountainous.

Soil, sandy loam, 1st. rate : clay, 3rd. rate.

No timber.

Mountainous land on 29.00 chs.

April 24, 1908.

April 25: At 7h.58m., a.m., l.m.t., I set off 38°54'N., on lat. arc, 13°12'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 13-14-23 and 24.

Thence I run

N. 89°56'E., on a random line, bet. secs. 13 and 24.

40.00 Set temp. ¼ sec. cor.

80.00 Intersect E. bdy. of Tp., 7 lks. N. of the cor. of secs. 13-18-19 and 24, heretofore described.

Thence I run

S. 89°59'W., on a true line,

Bet. secs. 13 and 24.

Ascend abruptly over mountainous land.

9.50 Spur, projects SW.

Abrupt descent.

18.00 Hollow, 75 ft. deep, course SW.

Ascend over rolling land.

40.00 Set a sandstone, 15x6x6 ins., 10 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

76.00 Ridge, bears N. and S.

Descend.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- 80.00 The cor. of secs. 13-14-23 and 24.  
Land mountainous and rolling.  
Soil, clay, 3rd. rate.  
No timber.  
Mountainous land on 80.00 chn.
- 
- N. 0° 01' W., bet. secs. 13 and 14.  
Descend over mountainous land.
- 12.00 Hollow, 50 ft. deep, course SE.  
Ascend.
- 14.00 Spur, projects SE.  
Descend.
- 18.10 Hollow, 100 ft. deep, course SW.  
Ascend.
- 29.50 Ridge, bears NE. and SW.  
Descend.
- 35.75 Road, NE. and SE., in bottom of hollow, 75 ft. deep, course SE.  
Ascend.
- 40.00 Set a redwood post, 3 ft. long, 3 in. sq., with marked stone, 24 in. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 14 on W. and 13 on E. face, dig pit, 12x12x12 in., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 40.25 Ridge, bears E. and W.  
Descend.
- 50.50 Telephone line, from Mosb to Thompsons, bears NE. and SW.
- 40.00 Set a pine post, 3 ft. long, 4 in. sq., with marked stone, 24 in. in the ground, for cor. of secs. 11-12-13 and 14, marked T122 S S 12 on NE.,  
R 10 E S 13 on SE.,  
S 14 on SW. and  
S 11 on NW. face, with 4 notches on S. and 1 notch
- 46.25  
33.75

SUBDIVISIONS OF T.32 S., R.19 E.

CHAINS

on E. edges, dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor. Land, mountainous and rolling.  
 Soil, clay, 3rd. rate.  
 No timber.  
 Mountainous land on 46.25 chs.

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N. 89° 59' E., on a random line, bet. secs. 12 and 13.

40.00 Set temp. 1/4 sec. cor.

40.02 Intersect E. bdy. of Tp., at the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

S. 89° 59' W., on a true line,  
 bet. secs. 12 and 13.

Descend over rolling land.

40.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S. 12 on N. face, 13 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

43.00 Road, bears NW. and SW. Ascend.

66.50 Telephone line, between Moab and Thompsons, bears NE. and SW., on top of ridge, bears N. and S.  
 Descend.

80.02 The cor. of secs. 11-12-13 and 14.

Land, rolling.  
 Soil, clay, 3rd. rate.  
 No timber.

April 25 : At this cor. I set off 13° 15' N., on decl. arc, and at 11h. 58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38° 55' N.

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## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

N.0°01'W., bet. secs. 11 and 12.

Ascend over rolling land.

36.00 Spur, projects SW.

Descend.

40.00 Set a sandstone, 12x12x10 ins., 8 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

40.75 Hollow, 75 ft. deep, course SW.

Ascend.

49.00 Spur, projects SW.

Descend.

63.50 Hollow, 75 ft. deep, course SW.

Ascend.

75.00 Ridge, bears NE. and SW.

Descend.

78.90 Road from Moab to Thompsons, bears NE. and SW.

80.00 Set a sandstone, 20x12x6 ins., 15 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay and sandy, 2nd. rate.

No timber.

N.89°59'E., on a random line, bet. secs. 1 and 12.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect E. bdy. of Tp., 3 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run

S.89°58'W., on a true line,

Bet. secs. 1 and 12.

## SUBDIVISIONS OF T.22 S., R.19 E.

- CHAINS Ascend over rolling land.
- 13.50 Telephone line, between Moab and Thompsons, bears NE. and SW.
- 40.02 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S1 on N. face, 12 on S face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 50.00 Ridge, bears NE. and SW.  
Descend.
- 59.50 Wash, 1.00 ch. wide, 25 ft. deep, in bottom of hollow, 75 ft. deep, course SW.  
Ascend.
- 69.85 Ridge, bears NE. and SW.  
Descend.
- 79.50 Road, from Moab to Thompsons, bears NE. and SW.
- 80.04 The cor. of secs. 1-2-11 and 12.  
Land, rolling.  
Soil, clay, 2nd. and 3rd. rate.  
No timber.
- 
- N. 0° 01' W., on a random line, bet. secs. 1 and 2.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 87.01 Intersect N. bdy. of Tp., 3 lks. west, of the cor. of secs. 1-2-35 and 36, heretofore described.  
Thence I run  
South, on a true line, bet. secs. 1 and 2.  
Gradual descent, through dense undergrowth.
- 7.50 Wash, 40 lks. wide, 20 ft. deep, course SW.
- 31.00 Leave dense undergrowth, enter sparse brush.
- 47.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 2 on W. face, 1 on E. face, dig pits, 18x18x12 ins., N. and S. of post,

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

87.01  
31

The cor. of secs. 1-2-11 and 12.

56-01

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Dense undergrowth on 31.00 chs.

April 25, 1908

April 26 : At 7h.58m., a.m., l.m.t., I set off 38°51'N., on lat. arc, 13°32'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 2-3-34 and 35, heretofore described on the S. bdy. of the Tp.

Thence I run

N.0°01'W., bet. secs. 34 and 35.

Ascend over sandy land, through dense undergrowth.

18.00

Begin abrupt ascent over mountainous land, bearing NW. and SE.

31.84

Spur, projects NW.

Descend.

37.50

Hollow, 50 ft. deep, course SW.

Ascend.

40.00

Spur, projects SW.

Set a sandstone, 18x12x7 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

Descend.

42.50

Hollow, 100 ft. deep, course SW.

Ascend.

50.00

Rocky spur, projects SW.

Abrupt descent.

65.00

Hollow, 100 ft. deep, course SW.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Ascend.

77.90 Ridge, bears E. and W.

Abrupt descent.

80.00 Set a sandstone, 18x9x6 ins., 12 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked with 1 notch on S. and 2 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

Land, rolling and mountainous.

Soil, sandy, 2nd. rate : rocky, 3rd. and 4th. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

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East, on a random line, bet. secs. 26 and 35.

40.00 Set temp. ¼ sec. cor.

80.10 Intersect N. and S. line, 10 lks. N. of the cor. of secs. 25-26-35 and 36.

Thence I run

N. 89° 56' W., on a true line,

Bet. secs. 26 and 35.

Descend over rocky and mountainous land, through scattering timber.

0.50 Hollow, 100 ft. deep, course NW.

Abrupt ascent over sandstone ledges.

11.00 Sandstone ridge, bears NW. and SE.

Abrupt descent.

20.00 Hollow, 150 ft. deep, course SW.

Abrupt ascent.

33.00 Sandstone ridge, bears NE. and SW.

Leave timber.

Abrupt descent.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- 40.05 Set a sandstone, 18x9x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 46.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent over sandstone boulders.
- 51.70 Sandstone ridge, bears NE. and SW.  
Abrupt descent.
- 73.00 Hollow, 150 ft. deep, course NW.  
Abrupt ascent.
- 80.10 The cor. of secs. 26-27-34 and 35.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.10 chs.  
April 26 : At this cor. I set off  $13^{\circ}35'N.$ , on decl. arc, and at 11h.58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}52'N.$
- 
- $N.0^{\circ}01'W.$ , bet. secs. 26 and 27.
- Abrupt descent over rocky and mountainous land.
- 0.80 Hollow, 75 ft. deep, course E.  
Abrupt ascent.
- 2.75 Spur projects E.  
Abrupt descent.
- 16.00 Leave rocky land, descend over sandy land, through dense undergrowth.
- 33.50 Hollow, 100 ft. deep, course E.  
Abrupt ascent over sandstone ledges.
- 40.00 Set a sandstone, 18x14x9 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 40.75 Sandstone spur, projects E.

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

Abrupt descent.

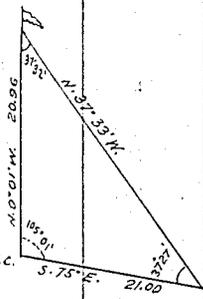
43.00 Hollow, 100 ft. deep, course NW.  
Abrupt ascent.

51.00 Sandstone spur, projects NW.  
Abrupt descent.

52.60 To south bank of Valley City Reservoir.  
Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for meander corner of fracl. secs. 26 and 27, marked MC on N., face, 2 grooves on E. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, S. of cor.  
Pits impracticable.  
Point for triangulation.  
To determine the distance across the reservoir I set a flag on N. bank of reservoir; then measure a base line, S. 75° 00' E., 21.00 chs. to a point whence the flag bears N. 37° 33' W., from the flag the east end of the base bears S. 37° 33' E., by separate measurement of each angle they are found respectively 105° 01', 37° 27' and 37° 32', their sum being 180° 00'.  
I compute the distance across the reservoir as follows:  
 $\sin \frac{37^\circ 27'}{37^\circ 32'} \times \text{base, or } \frac{0.60807}{0.60922} \times 21.00 = 20.96 \text{ chs.,}$   
also 52.60 + 20.96 makes

73.56 To north bank of Valley City Reservoir.  
Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for meander cor. of fracl. secs. 26 and 27, marked M C on S.,  
T 22 S on N.,  
R 19 E S 27 on W., and  
S 26 on E. face, dig a pit, 36x36x12 ins., 8 ft. N. of post, and raise a mound of earth, 4 ft. base, 2 ft. high, N. of cor.  
Ascend over sandy land.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone,



52.60  
27.40

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

24 ins. in the ground, for cor. of secs. 22-23-26 and 27,  
 marked T 22 S S 23 on NE.,  
 R 19 E S 26 on SE.,  
 S 27 on SW., and  
 S 22 on NW. face, with 2 notches on S. and E. edges,  
 dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise  
 a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, Mountainous and rolling.  
 Soil, rocky, 3rd. and 4th. rate. loam, 1st. rate.  
 No timber.  
 Mountainous land on 52.60 chs.

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S. 89°56'E., on a random line, bet. secs. 23 and 26.

40.00 Set temp. ¼ sec. cor.

79.98 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 23-24-25 and 26.

Thence I run

N. 89°58'W., on a true line,

Bet. secs. 23 and 26.

Gradual descent.

39.99 Set a redwood post., 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 23 on N. face, 26 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

79.98 The cor. of secs. 22-23-26 and 27.

Land, sloping west.

Soil, sandy loam, 1st. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.19 W.

## CHAINS

N.0°01'W., bet. secs. 22 and 23.

Ascend gradually through dense undergrowth.

12.00 Road, bears NE. and SW.

17.25 Telephone line, between Moab and Thompsons, bears NE. and SW.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 22 on W. face, 23 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a redwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked T 22 S S 14 on NE.,

R 19 E S 23 on SE.,

S 22 on SW., and

S 15 on NW. face, with 3 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

April 26, 1908

April 27 : At 7h.58m., a.m., l.m.t., I set off 38°54'N., on lat. arc, 13°51'N., on decl. arc, and determine a meridian with the solar at the cor. of secs. 14-15-22 and 23.

Thence I run

S. 89°58'E., on a random line, bet. secs. 14 and 23.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 13-14-23 and 24.

Thence I run

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

S.89°57'W., on a true line,

Bet. secs. 14 and 23.

Descend over mountainous land.

5.00 Hollow, 75 ft. deep, course S.

Ascend.

10.00 Spur, projects S.

Descend.

12.30 Hollow, 50 ft. deep, course S.

Ascend.

15.00 Spur, projects S.

Descend.

20.10 Hollow, 60 ft. deep, course SW.

Ascend.

23.50 Spur, projects SW.

Descend.

30.30 Road, bears NE. and SW.

34.00 Hollow, 50 ft. deep, course SW.

Ascend over rolling land, through dense undergrowth.

39.75 Telephone line, between Moab and Thompsons, bears NE. and SW.

40.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 14 on N. face, 23 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

58.00 Wash, 2.00 chs. wide, 10 ft. deep, course SW.

80.02 The cor. of secs. 14-15-22 and 23.

Land, mountainous and rolling.

Soil, clay, 3rd. rate ; sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or

mountainous land on 80.02 chs.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

N.0°01'W., bet.secs.14 and 15.

Ascend over rolling land, through dense undergrowth.

26.00

Road, bears NE. and SW.

39.95

Road from Moab to Thompsons, bears NE. and SW.

40.00

Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 15 on W. face, 14 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00

Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked T 22 S S 11 on NE.,

R 19 E S 14 on SE.,

S 15 on SW., and

S 10 on NW. face, with 4 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

N.89°57'E., on a random line, bet.secs.11 and 14.

40.00

Set temp.  $\frac{1}{4}$  sec. cor.

80.04

Intersect N. and S. line, 3 lks. S. of the cor. of secs. 11-12-13 and 14.

Thence I run

S.89°56'W., on a true line,

Bet.secs.11 and 14.

Descend over rolling land.

14.00

Enter dense undergrowth.

18.25

Wash, 50 lks. wide, 15 ft. deep, course SW.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- 22.00 Leave dense undergrowth.
- 40.02 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 11 on N. face, 14 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 57.00 Road, from Moab to Thompsons, bears NE. and SW.
- 80.04 The cor. of secs. 10-11-14 and 15.
- 72-04  
 Land, rolling.  
 Soil, sandy loam, 1st. rate.  
 No timber.  
 Undergrowth, greasewood and sage.  
 Land covered with dense undergrowth on 8.00 chs.  
 April 27 : At this cor. I set off  $13^{\circ}54'N.$ , on decl. arc, and at 11h 58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}55'N.$
- N.  $0^{\circ}01'W.$ , bet. secs. 10 and 11.
- Ascend over rolling land.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 10 on W. face, 11 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a sandstone, 15x10x10 ins., 10 ins. in the ground. for cor. of secs. 2-3-10 and 11, marked with 5 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, rolling.  
 Soil, sandy loam, 1st. rate.  
 No timber.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

N.89°56'E., on a random line, bet. secs. 2 and 11.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 1-2-11 and 12.

Thence I run

S.89°51'W., on a true line,

Bet. secs. 2 and 11.

Descend over rolling land, through dense undergrowth.

39.99 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 2 on N. face, 11 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

79.98 The cor. of secs. 2-3-10 and 11.

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 79.98 chs.

N.0°01'W., on a random line, bet. secs. 2 and 3.

40:00 Set temp.  $\frac{1}{4}$  sec. cor.

87.21 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 2-3-34 and 35, heretofore described.

Thence I run

S.0°03'E., on a true line,

Bet. secs. 2 and 3.

Descend over rolling land.

47.21 Set a sandstone, 18x12x7 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

49.00 Enter dense undergrowth.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

50.00 Wash, 1.25 chs. wide, 20 ft. deep, course SE.

65.00 Same wash, 50 lks. wide, 15 ft. deep, course SW.

87.21 The cor. of secs. 2-3-10 and 11.

38.21

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 38.21 chs.

April 27, 1908

April 28 : At 7h.57m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $14^{\circ}10'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 3-4-33 and 34, heretofore described on the S. bdy. of the Tp.

Thence I run

$N.0^{\circ}02'W.$ , bet. secs. 33 and 34.

Ascend gradually.

40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 33 on W. and 34 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

42.00 Enter dense undergrowth.

49.50 Leave dense undergrowth.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked T 22 S S 27 on NE.

R 19 E S 34 on SE.,

S 33 on SW., and

S 28 on NW. face, with 1 notch on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

49.00

7.50

72.50

## SUBDIVISIONS OF T.22 S., R.19 E. \

## CHAINS

From this cor., W.P. Hamblen's frame house, in Valley City,  
bears N.45°10'E.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth on 7.50 chs.

---

East, on a random line, bet. secs. 27 and 34.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 3 lks. S. of the cor. of secs.

26-27-34 and 35.

Thence I run

S.89°59'W., on a true line,

Bet. secs. 27 and 34.

Ascend abruptly over rocky and mountainous land.

7.10 Rocky ridge, bears N. and S.

Ascend abruptly over broken land.

38.50 Foot of abrupt descent, bears NW. and SE.

Gradual descent over sandy land, through dense undergrowth.

40.01 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$

sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,

2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

41.75 Wash, 50 lks. wide, 10 ft. deep, course SE.

45.25 Road, from Moab to Thompsons, bears NW. and SE.

47.50 Telephone line, from Moab to Thompsons, bears NW. and  
SE.

80.02 The cor. of secs. 27-28-33 and 34.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate ; sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

SUBDIVISIONS OF T. 22 S., R. 19 E.

CHAINS

Land covered with dense undergrowth or mountainous land on 80.02 chs.

N.0°02'W., bet. secs. 27 and 28.

Ascend over rolling land.

11.00 Wash, 20 lks. wide, 10 ft. deep, course SW.

26.50 Road from Valley City to Little Grande, bears NW. and SE.

40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 28 on W. face, 27 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

61.00 Enter dense undergrowth.

70.00 Wash, 20 lks. wide, 10 ft. deep, course SE.

80.00 Set a granite stone, 18x8x5 ins., 12 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked with 2 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

From this cor. W. P' Hamblen's house in Valley City, bears S. 29° 20' E.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth on 19.00 chs.

April 28 : At this cor. I set off  $14^{\vee} 13' N.$ , on decl. arc, and at 11h. 58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\vee} 53' N.$

SUBDIVISIONS OF T.22 S., R.19 E.

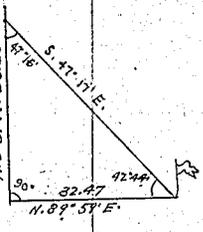
CHAINS

N. 89°59'E., on a random line, bet. secs. 22 and 27.

40.00 Set temp. 1/4 sec. cor.

46.15 To west bank of Valley City Reservoir, set temp. meander cor.

To determine the dist. across the reservoir, I set a flag on line on E. bank of reservoir, then measure a base line N. 0°01'W., 30.00 chs. dist., to a point whence the flag bears S. 47°17'E., from the flag the north end of the base bears N. 47°17'W., therefore, the dist. is  $\tan. 47^\circ 16' \times \text{base}$ , or  $1.0824 \times 30.00 = 32.47$  chs. ; also  $46.15 + 32.47$  makes



78.62 To east bank of reservoir: set temp. meander cor.

80.00 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 22-23-26 and 27.

Thence I run

N. 89°59'W., on a true line,  
Bet. secs. 22 and 27.

Gradual descent.

1.38 To east bank of Valley City Reservoir.

Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for meander cor. of fracl. secs. 22 and 27, marked MC on W.,

T 22 S on E.,

R 19 E S 22 on N. and

S 27 on S. face, dig a pit, 36x36x12 ins.

8 ft. E. of post, and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.

33.85 To west bank of Valley City Reservoir.

Set a sandstone, 24x8x4 ins., 18 ins. in the ground, for meander cor. of fracl. secs. 22 and 27, marked MC on E. face, 2 grooves on S. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- Ascend abruptly over rocky and mountainous land.
- 35.00 Telephone line, bet. Moab and Thompsons, bears NE. and SW.
- 40.00 Rocky spur, projects NE.
- Set a granite stone, 15x10x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- Abrupt descent.
- 44.25 Hollow, 100 ft. deep, course NE.
- Abrupt ascent.
- 49.00 Rocky ridge, bears N. and S.
- Abrupt descent.
- 56.00 Hollow, 100 ft. deep, course S.
- Abrupt ascent.
- 60.25 Rocky spur, projects SW.
- Abrupt descent.
- 62.50 Road between Moab and Thompsons, bears N. and S.
- Leave mountainous land, bears N. and S.
- Gradual descent.
- 80.00 The cor. of secs. 21-22-27 and 28.
- 28.65 Land, mountainous.
- 51 35 Soil, rocky, 3rd. and 4th. rate ; loam, 1st. rate.
- No timber.
- Mountainous land on 28.65 chs.
- 
- N.  $0^{\circ}02'W.$ , bet. secs. 21 and 22.
- Ascend over rolling land, through dense undergrowth.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 21 on W. face, 22 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 76.00 Wash, 15 lks. wide, 5 ft. deep, course SW.
- 80.00 Set a redwood post, 3 ft. long, 4 ins. sq., with marked

SUBDIVISIONS OF T. 22 S., R. 19 E.

CHAINS

stone, 24 ins. in the ground, for cor. of secs. 15-16-21 and 22,  
 marked T 22 S S 15 on NE.,  
 R 19 E S 22 on SE.,  
 S 21 on SW., and  
 S 16 on NW. face, with 3 notches on S. and E. edges,  
 dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise  
 a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling.  
 Soil, loam, 1st. rate.  
 No timber.  
 Undergrowth, greasewood and sage.  
 Land, covered with dense undergrowth on 80.00 chs.

S. 89° 59' E., on a random line, bet. secs. 15 and 22.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line, 5 lks. S. of the cor. of secs.  
14-15-22 and 23.

Thence I run

S. 89° 59' W., on a true line,  
 Bet. secs. 15 and 22.

Over rolling land.

5.10 Road, bears NE. and SW.

22.00 Road, from Moab to Thompsons, bears NE. and SW.

31.50 Road, bears NE. and SW.

40.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone,  
 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 15 on N.  
 face, 22 on S. face, dig pits, 18x18x12 ins., E. and W. of  
 post, 3 ft. dist., and raise a mound of earth, 3½ ft. base,  
 1½ ft. high, N. of cor.

Enter dense undergrowth.

57.00 Road, bears N. and S.

74.00 Wash, 15 lks. wide, 5 ft. deep, course SW.

80.02 The cor. of secs. 15-16-21 and 22.

40.01  
40.01

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth, on 40.01 chs.

April 28, 1908

April 29 : At 7h.57m., a.m., l.m.t., I set off  $38^{\circ}54'N.$ , on lat. arc,  $14^{\circ}29'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 15-16-21 and 22.

Thence I run

$N.0^{\circ}02'W.$ , bet. secs. 15 and 16.

Gradual ascent over rolling land, through dense undergrowth.

40.00 Set a redwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 16 on W. face, 15 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked T 22 S S 10 on NE.,  
R 19 E S 15 on SE.,  
S 16 on SW., and  
S 9 on NW. face, with 4 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

N.89°59'E., on a random line, bet. secs. 10 and 15.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 10-11-14 and 15.

Thence I run

N.89°56'W., on a true line,

Bet. secs. 10 and 15.

Descend over rolling land, through dense undergrowth.

39.99 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 10 on N. face, 15 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

49.50 Wash, 40 lks. wide, 10 ft. deep, course SW.

79.98 The cor. of secs. 9-10-15 and 16.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 79.98 chs.

N.0°02'W., bet. secs. 9 and 10.

Ascend over rolling land, through dense undergrowth.

40.00 Set a redwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 9 on W. face, 10 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a redwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked T 22 S S 3 on NE.,

R 19 E S 10 on SE.,

S 9 on SW., and

S 4 on NW. face, with 5 notches on S. and 3 notches

STON G. PETERSON  
MEMBER

W. J. PARKER  
CHAIRMAN

JOSEPH CHEZ  
MEMBER

172A



THE STATE OF UTAH  
STATE ROAD COMMISSION  
SALT LAKE CITY

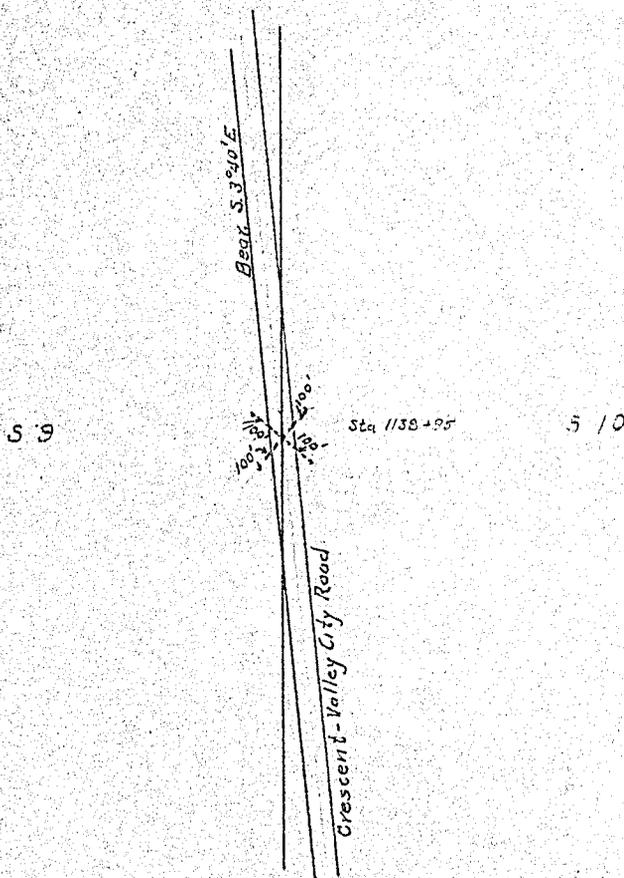
AGNES McNEIL  
SECRETARY

H. S. KERR  
CHIEF ENGINEER

N.R.F.L.P. 10A  
Crescent-Valley City

DISCRIPTION OF CORNER MONUMENT

A 3" bronz disc was set in concrete 12" below the surface and 1' to the west of the  $\frac{1}{2}$  of Crescent-Valley City highway, marked thus: , for the  $\frac{1}{4}$  cor. of sections 9 and 10 T.22S., R.19E., S.L.B. & M. The corner was witnessed by 4-1" steel pins, extending 6" above the ground, set as indicated.



## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

April 29 : At this cor. I set off 14 $^{\circ}$ 32'N., on decl. arc, and at 11h.57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38 $^{\circ}$ 56'N.

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S.89 $^{\circ}$ 56'E., on a random line, bet. secs. 3 and 10.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.94 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 2-3-10 and 11.

Thence I run

N.89 $^{\circ}$ 55'W., on a true line, bet. secs. 3 and 10.

Descend over rolling land, through dense undergrowth.

3.00 Wash, 50 lks. wide, 15 ft. deep, course SW.

39.97 Set a redwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 3 on N. face, 10 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

79.94 The cor. of secs. 3-4-9 and 10.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land, covered with dense undergrowth on 79.94 chs.

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## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- N.0°02'W., on a random line, bet. secs. 3 and 4.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 87.12 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 3-4-33 and 34, heretofore described.
- Thence I run
- S.0°04'E., on a true line,  
Bet. secs. 3 and 4.
- Descend over rolling land, through dense undergrowth.
- 47.12 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 4 on W. face, 3 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- 87.12 The cor. of secs. 3-4-9 and 10.
- Land, rolling.
- Soil, loam, 1st. rate.
- No timber.
- Undergrowth, sage and greasewood.
- Land covered with dense undergrowth on 87.12 chs.
- April 29, 1908
- 
- April 30 : At 7h.57m., a.m., l.m.t., I set off 38°51'N., on lat. arc, 14°48'N., on decl. arc, and determine a meridian with the solar at the cor. of secs. 4-5-32 and 33, heretofore described on the S. bdy. of the Tp.
- Thence I run
- N.0°03'W., bet. secs. 32 and 33.
- Ascend over rolling land, through sparse brush.
- 38.00 Wash, 10 lks. wide, 10 ft. deep, course SW.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 32 on W. face, 33 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked T 22 S S 28 on NE., R 19 E S 33 on SE., S 32 on SW., and S 29 on NW. face, with 1 notch on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling.  
 Soil, loam, 1st. rate.  
 No timber.  
 Undergrowth, sage and greasewood.

East, on a random line, bet. secs. 28 and 33.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line, 2 lks. S. of the cor. of secs. 27-28-33 and 34.

Thence I run  
 S. 89° 59' W., on a true line,  
 Bet. secs. 28 and 33.

Gradual ascent over rolling land.

8.25 Wash, 20 lks. wide, 10 ft. deep, course SW.

40.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 28 on N. face, 33 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

80.02 The cor. of secs. 28-29-32 and 33.

Land, rolling.  
 Soil, loam, 1st. rate.  
 No timber.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

N.0°03'W., bet.secs.28 and 29.

Ascend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 29 on W. face, 28 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

75.05 Road, from Valley City to Little Grande, bears NW. and SE.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked T 22 S S 21 on NE.,

R 19 E S 28 on SE.,

S 29 on SW., and

S 20 on NW. face, with 2 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist, and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling.

Soil, loam, 1st. rate.

No timber.

N.89°59'E., on a random line, bet.secs.21 and 28.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 21-22-27 and 28.

Thence I run

S.89°57'W., on a true line,

Bet.secs.21 and 28.

Gradual descent over rolling land.

6.25 Wash, 10 lks. wide, 10 ft. deep, course SE.

Gradual ascent.

39.99 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 21 on N. face, 28 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist.,

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 79.98 The cor. of secs. 20-21-28 and 29.  
Land, rolling.  
Soil, loam, 1st. rate.  
No timber.  
April 30 : At this cor. I set off  $14^{\circ}50'N.$ , on decl. arc, and at 11h.57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}53'N.$
- 
- N.  $0^{\circ}03'W.$ , bet. secs. 20 and 21.  
Gradual ascent over rolling land.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 20 on W. face, 21 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked T 22 S S 16 on NE.,  
R 19 E S 21 on SE.,  
S 20 on SW., and  
S 17 on NW. face, with 3 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Land, rolling.  
Soil, loam, 1st. rate.  
No timber.
- 
- N.  $89^{\circ}57'E.$ , on a random line, bet. secs. 16 and 21.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.02 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 15-16-21 and 22.

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

Thence I run

N. 89° 58' W., on a true line,

Bet. secs. 16 and 21.

Ascend over rolling land.

36.00 Begin descent.

40.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 16 on N. face, 21 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

80.02 The cor. of secs. 16-17-20 and 21.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

N. 0° 03' W., bet. secs. 16 and 17.

Ascend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 17 on W. face, 16 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked T 22 S S 9 on NE.,

R 19 E S 16 on SE.,

S 17 on SW., and

S 8 on NW. face, with 4 notches on S. and E. edges,

dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

S.89°52'E., on a random line, bet. secs. 9 and 16.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 9-10-15 and 16.

Thence I run

S.89°59'W., on a true line,

Bet. secs. 9 and 16.

Gradual ascent over rolling land, through dense undergrowth.

40.03 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 9 on N. face, 16 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

80.06 The cor. of secs. 8-9-16 and 17.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.06 chs.

April 30, 1908

May 1 : At 7h.57m., a.m., l.m.t., I set off 38°55'N., on lat. arc, 15°06'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 8-9-16 and 17.

Thence I run

N.0°03'W., bet. secs. 8 and 9.

Gradual ascent over rolling land, through dense undergrowth.

36.35 Wash, 20 lks. wide, 5 ft. deep, course SW.

40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone,

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 8 on W. face, 9 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

80.00 Set a sandstone, 18x12x9 ins., 12 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, loam, 1st. rate : clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land, covered with dense undergrowth on 80.00 chs.

N.  $89^{\circ}59'E.$ , on a random line, bet. secs. 4 and 9.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.12 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 3-4-9 and 10.

Thence I run

S.  $89^{\circ}57'W.$ , on a true line,

Bet. secs. 4 and 9.

Over level land, through dense undergrowth.

37.00 Wash, 50 lks. wide, 10 ft. deep, course SW.

40.06 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

64.00 Leave level land, begin ascend over rolling clay.

80.12 The cor. of secs. 4-5-8 and 9.

Land, rolling.

Soil, loam, 1st. rate : clay, 3rd. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.12 chs.

N.0°03'W., on a random line, bet. secs. 4 and 5.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

87.26 Intersect N. bdy. of Tp., 9 lks. west of the cor. of secs. 4-5-32 and 33, heretofore described.

Thence I run

S.0°01'W., on a true line,

Bet. secs. 4 and 5.

Ascend abruptly over mountainous land.

2.00 Spur, projects SW.

Abrupt descent.

4.25 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

11.00 Spur, projects W.

Abrupt descent.

14.00 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

17.75 Spur, projects SW.

Abrupt descent.

19.00 Hollow, 150 ft. deep, course SW.

Abrupt ascent.

25.00 Ridge, bears NE. and SW.

Abrupt descent.

43.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

47.26 Set a sandstone, 16x8x6 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

77.00 Ridge, bears NE. and SW.

Abrupt descent.

## SUBDIVISIONS OF T.22 S..R.19 E.

## CHAINS

- 81.00 Hollow, 75 ft. deep, course E.  
Abrupt ascent.
- 82.00 Spur, projects E.  
Abrupt descent.
- 87.26 Foot of abrupt descent, bears NE. and SW.  
The cor. of secs. 4-5-8 and 9.  
Land, mountainous.  
Soil, clay and sand, 3rd. rate.  
No timber.  
Mountainous land on 87.26 chs.

May 1, 1908

May 2 : At 7h.57m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $15^{\circ}24'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 5-6-31 and 32, heretofore described on the S. bdy. of the Tp.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 31 and 32.

Ascend over rolling land, through sparse brush.

- 40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 31 on W. face, 32 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, E. of cor.
- 89.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 29-30-31 and 32, marked T 22 S S 29 on NE.,  
R 19 E S 32 on SE.,  
S 31 on SW., and  
S 30 on NW face, with 1 notch on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Land, rolling.

Soil, loam, 1st. rate.

No timber.

East, on a random line, bet. secs. 29 and 32.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line, 15 lks. N. of the cor. of secs. 28--  
29-32 and 33.

Thence I run

N.  $89^{\circ}54'W.$ , on a true line,

Bet. secs. 29 and 32.

Gradual ascent over rolling land.

40.03 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone,  
24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S. 29 on N.  
face, 32 on S. face, dig pits, 18x18x12 ins., E. and W. of post,  
3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft.  
high, N. of cor.

80.06 The cor. of secs. 29-30-31 and 32.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

West, on a random line, bet. secs. 30 and 31.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

95.47 Intersect W. bdy. of Tp., 30 lks. S. of the cor. of secs.  
25-30-31 and 36, heretofore described.

Thence I run

S.  $89^{\circ}49'E.$ , on a true line,

Bet. secs. 30 and 31.

Descend over rolling land.

55.47 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone,  
24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S. 30 on N.  
face, 31 on S. face, dig pits, 18x18x12 ins., E. and W. of post,

## SUBDIVISIONS OF T.22 S.19 E.

## CHAINS

- 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 95.47 The cor. of secs. 29, 30, 31, and 32.  
Land, rolling.  
Soil, clay loam, 2nd. rate.  
No timber.
- 
- N.  $0^{\circ}03'W.$ , bet. secs. 29 and 30.  
Gradual ascent over rolling land.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 30 on W. face, 29 on E. face, dig pits,  $18 \times 18 \times 12$  ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a sandstone,  $15 \times 11 \times 5$  ins., 10 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked with 2 notches on S. and 5 notches on E. edges, dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.  
Soil, clay loam, 2nd. rate.  
No timber.
- 
- S.  $89^{\circ}54'E.$ , on a random line, bet. secs. 20 and 29.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.08 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 20-21-28 and 29.  
Thence I run  

$$N. 89^{\circ}56'W., \text{ on a true line,}$$

$$\text{Bet. secs. 20 and 29.}$$
Gradual ascent over rolling land,
- 7.50 Road, from Valley City to Little Grande, bears NW. and SE.
- 40.04 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 20 on N.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

face, 29 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

80.08 The cor. of secs. 19-20-29 and 30.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

May 2 : At this cor. I set off 15°26'N., on decl. arc, and at 11h. 57m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38°53'N.

N. 89°49'W., on a random line, bet. secs. 19 and 30.

40.00 Set temp. ¼ sec. cor.

95.39 Intersect W. bdy. of Tp., 4 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.

Thence I run

S. 89°50'E., on a true line, bet. secs.

19 and 30.

Ascend through dense undergrowth.

9.00 Ridge, bears N. and S.

Abrupt descent.

16.00 Foot of abrupt descent, bears NE. and SW.

Descend over rolling land.

55.39 Set a sandstone, 18x7x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

95.39 The cor. of secs. 19-20-29 and 30.

<sup>16</sup>  
79.39 Land, rolling and mountainous.

Soil, clay, 2nd. and 3rd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or mountainous land on 16.00 chs.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

N.0°03'W., bet. secs. 19 and 20.

Gradual ascent over rolling land.

11.00 Road from Valley City to Little Grande, bears NW. and SE.

40.00 Set a sandstone, 18x9x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist.,and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.80.00 Set a sandstone, 20x10x5 ins., 15 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked with 3 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, clay loam, 2nd. rate.

No timber.

S.89°56'E., on a random line, bet. secs. 17 and 20.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.12 Intersect N. and S. line, 14 lks. N. of the cor. of secs. 16-17-20 and 21.

Thence I run

N.89°50'W., on a true line,

Bet. secs. 17 and 20.

Gradual ascent over rolling land, through dense undergrowth.

40.06 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  S 17 on N. face, 20 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.12 The cor. of secs. 17-18-19 and 20.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.12 chs.

N.  $89^{\circ}50'W.$ , on a random line, bet. secs. 18 and 19.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

95.28 Intersect W. bdy. of Tp., 18 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.

Thence I run

S.  $89^{\circ}44'E.$ , on a true line,

Bet. secs. 18 and 19.

Ascend over rolling land, through dense undergrowth.

55.28 Set a sandstone,  $18 \times 9 \times 4$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits,  $18 \times 18 \times 12$  ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

66.25 Ridge, bears NE. and SW.

Abrupt descent.

78.70 Hollow, 100 ft. deep, course SE. abrupt ascent.

82.00 Spur, projects SE.

Abrupt descent.

90.00 Foot of abrupt descent, bears NE. and SW.

Descend.

95.28 The cor. of secs. 17-18-19 and 20.

Land, rolling and mountainous.

Soil, sandy loam, 1st. rate : clay, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 95.28 chs.

May 2, 1908

May 3: At 7h. 57m., a.m., l.m.t., I set off  $38^{\circ}54'N.$ , on lat. arc,  $15^{\circ}42'N.$ , on decl. arc, and determine a meridian with the solar at the cor. of secs. 17-18-19 and 20.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

Thence I run

N.0°03'W., bet. secs. 17 and 18.

Ascend over rolling clay hills, over washes draining SE and mountainous land.

40.00 Set a sandstone, 15x12x10 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Begin abrupt, ascent; bears NE. and SW.

48.50 Spur, projects E.

Abrupt descent.

51.50 Hollow, 75 ft. deep, course SE.

Abrupt ascent.

57.00 Ridge, bears NE. and SW.

Abrupt descent.

61.00 Hollow, 60 ft. deep, course SW.

Abrupt ascent.

64.25 Spur, projects SW.

Abrupt descent.

80.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked with 4 notches on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

S.89°50'E., on a random line, bet. secs. 8 and 17.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 8-9-16 and 17.

Thence I run

## SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS	
	<p>N.89°49'W., on a true line, Bet.secs.8 and 17.</p>
	Gradual ascent over rolling land, through dense undergrowth.
40.03	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 8 on N. face, 17 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
67.00	Begin abrupt ascent, bears NE. and SW.
70.50	Ridge, bears NE. and SW. Descend.
80.06	The cor. of secs. 7-8-17 and 18. Land, rolling and mountainous. Soil, loam, 1st. rate ; clay, 3rd. rate. No timber. Undergrowth, greasewood and sage. Dense undergrowth or mountainous land on 80.06 chs.
	<hr/> <p>N.89°44'W., on a random line, bet.secs.7 and 18.</p>
40.00	Set temp. $\frac{1}{4}$ sec. cor.
95.11	Intersect W. bdy. of Tp., 10 lks. N. of the cor. of secs. 7-12-13 and 18, heretofore described. Thence I run
	<p>S.89°48'E., on a true line, Bet.secs.7 and 18.</p>
	Ascend over rolling land, through dense undergrowth.
55.11	Set a sandstone, 15x8x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
95.11	The cor. of secs. 7-8-17 and 18. Land, rolling. Soil, loam, 1st. rate.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 95.11 chs.

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N.0°03'W., bet.secs.7 and 8.

Descend over rolling land, through dense undergrowth.

14.25 Hollow, 75 ft. deep, course W.

Ascend.

40.00 Set a sandstone, 18x9x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 18x12x7 ins., 12 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked with 5 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

May 3 : At this cor. I set off 15°44'N., on decl. arc, and at 11h.57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°56'N.

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S.89°49'E., on a random line, bet.secs.5 and 8.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 4-5-8 and 9.

Thence I run

N.89°44'W., on a true line,

Bet.secs.5 and 8.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- Ascend abruptly over mountainous land.
- 6.60 Ridge, bears NE. and SW.
- Descend over rolling, sandy land, through dense undergrowth.
- 40.01 Set a sandstone, 18x7x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 80.02 The cor. of secs. 5-6-7 and 8.
- Land, mountainous and rolling.
- Soil, clay, 3rd. rate ; sandy, 2nd. rate.
- No timber.
- Undergrowth, sage and greasewood.
- Land covered with dense undergrowth or mountainous land on 80.02 chs.
- 
- N. 89°48' W., on a random line, bet. secs. 6 and 7.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 95.00 Intersect W. bdy. of Tp., 11 lks. N. of the cor. of secs. 1-6-7 and 12, heretofore described.
- Thence I run
- S. 89°52' E., on a true line,  
Bet. secs. 6 and 7.
- Descend abruptly over clay hills.
- 1.90 Wash, 1.00 ch. wide, 10 ft. deep, course SW.
- Ascend over broken clay land.
- 44.00 Begin abrupt ascent, bears NE. and SW.
- 50.00 Top of abrupt ascent, bears NE. and SW.
- Ascend over rolling land, through dense undergrowth.
- 55.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 72.00 Ridge, bears NE. and SW.

## SUBDIVISIONS OF T.22 S., R.19 E.

## CHAINS

- Descend.
- 81.00 Hollow, 50 ft. deep, course SW.
- Ascend.
- 95.00 The cor. of secs. 5-6-7 and 8.
- Land, Mountainous and rolling.
- Soil, clay, 3rd. rate. loam., 1st. rate.
- No timber.
- Undergrowth, greasewood and sage.
- Land covered with dense undergrowth or
- mountainous land on 95.00 chs.
- 
- N.0°03'W., on a random line, bet. secs. 5 and 6.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 86.91 Intersect N. bdy. of Tp., 22 lks. W. of the cor. of secs. 5-6-31 and 32, heretofore described.
- Thence I run
- S.0°06'W., on a true line,
- Bet. secs. 5 and 6.
- Descend over broken clay hill, and mountainous land.
- 5.00 Road, from Greenriver to Thompaons, bears NE. and SW.
- 32.00 Wash, 1.00 ch. wide, 15 ft. deep, course SW.
- Over level land.
- 37.50 Enter wash, 25 ft. deep, course SW.
- 40.00 Leave wash.
- 46.91 Set a sandstone, 12x10x8 ins., 8 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 53.00 Begin abrupt ascent, bears, NE. and SW.
- 56.00 Spur, projects SW.
- Abrupt descent.
- 57.00 Hollow, 50 ft. deep, course SW.
- Abrupt ascent.

SUBDIVISIONS OF T.22 S., R.19 E.

CHAINS

- 59.00 Spur, projects W.  
Abrupt descent.
- 62.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 65.50 Ridge, bears NE. and SW.  
Descend over rolling land, through dense undergrowth.
- 75.00 Hollow, 75 ft. deep, course SW.  
Ascend.
- 86.00 Spur, projects SW.  
Descend.
- 86.91 The cor. of secs. 5-6-7 and 8.  
Land, broken clay, level, cut by washes and mountainous.  
Soil, clay, 3rd. rate ; loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 86.91 chs.

May 13, 1908

MEANDERS, T.22 S., R.19 E.

Meanders of Valley City Reservoir, in secs. 22, 26 and 27.

I commence at the meander cor. of fracl. secs. 22 and 27, heretofore described.

May 4 : At 7h, 57m., a.m., l.m.t., I set off  $38^{\circ}53'N.$ , on lat. arc,  $15^{\circ}59'N.$ , on decl. arc, and determine a meridian with the solar, at the above described meander cor.

Thence I run with meanders in sec. 22.

Along rocky beach.

N.  $33^{\circ}10'W.$ , 4.00 chs.

S.  $84^{\circ}00'W.$ , 3.00 "

Not segregated. See Hon. Commissioners letter I. C. L. D. B. dated July 31, 1909. - No 5412

MEANDERS IN T.22 S., R.19 E.

Meanders in sec.22, continued.

- N.38°00'W., 4.00 chs. , over sandy beach.
- N.19°00'E., 2.00 "
- S.68°00'E., 2.00 "
- N.20°00'E., 3.10 "
- N.5°00'E., 5.90 "
- N.86°00'E., 3.00 "
- S.75°00'E., 10.20 "
- S.22°30'E., 11.40 "
- N.61°00'E., 6.40 "
- S.78°00'E., 12.00 "
- S.21°00'E., 4.00 " to meander cor.of fractl.

secs.22 and 27.

Land, level.

Soil, rocky and sandy on beach, away from beach, loam, 1st. rate.

No timber.

My original. See also Commissioner's letter to C.L.P. dated July 31, 1905.

Thence in sec.27.

South, 6.44 chs. Along sandy beach.

East, 1.38 " , to meander cor.of fractl.

secs.26 and 27.

Land, level.

Soil, loam, 1st. rate.

No timber.

Thence in sec.26.

N.77°10'E., 7.80 chs. Along marshy beach.

N.87°00'E., 6.00 "

N.89°30'E., 6.80 "

East, 7.80 "

N.59°00'E., 3.80 "

N.49°00'E., 3.00 "

MEANDERS IN T.22 S., R.19 E.,

*Not segregated. See Dam Commissioners letter F. C. L. D. B. dated July 31, 1909. No 5412*

Meanders in sec. 26, continued.

S. 45° 00' E., 3.00 chs., through dense undergrowth.

S. 20° 00' W., 7.00 "

S. 25° 00' E., 10.00 " leave dense undergrowth.

S. 39° 00' W., 3.00 "

S. 8° 00' E., 7.00 "

S. 68° 00' W., 11.00 " Along rocky beach.

S. 25° 00' W., 2.00 "

N. 82° 00' W., 17.00 "

N. 70° 00' W., 8.00 "

N. 61° 00' W., 1.60 chs., to meander cor. of fracl. secs. 26 and 27, heretofore described.

Land, level.

Soil, loam, rocky,, away from beach loam, 1st rate, rocky, 3rd. and 4th. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense greasewood, on 17.00 chs.

Thence in sec. 27.

Along steep slope of broken sandstone ledges.

N. 68° 20' W., 2.60 chs.

N. 48° 30' W., 5.10 "

N. 42° 00' W., 6.00 chs., leave ledges, S.E. end of dam.

Along middle line of dam, 12 ft. high, top width, 7 ft.

N. 42° 00' W., 2.00 "

N. 61° 00' W., 2.00 "

N. 69° 30' W., 16.80 " To NW. end of dam.

Along steep rocky east slope.

N. 11° 00' E., 3.00 "

N. 21° 00' W., 4.00 "

N. 48° 00' W., 7.30 " , to meander cor. of fracl. secs. 22 and 27, the place of beginning.

## MEANDERS IN T. 22 S., R. 19 E.

Meanders in sec. 26, concluded.  
 Land, mountainous and level.  
 Soil, rocky and earthen dam, 3rd. and 4th. rate.  
 No timber.  
 Mountainous land on 26.00 chs.

May 4, 1908.

## GENERAL DESCRIPTION.

This township is mountainous in the southeastern and northwestern portions, while the balance of the township is generally rolling with a few broken clay hills in the eastern and western portions.

The soil of the mountainous portions is rocky or clay while the balance of the township is sandy or clay loam capable of producing crops with irrigation.

A scattering growth of cedar and pinon timber is found on the mountainous portion of the south east portion of the township, while the balance of the township supports a growth of undergrowth, which is sparse on the southern portion of the township and dense in the northern portion.

The reservoir in secs. 22, 26 and 27, is formed by the melting of the snows in the spring and has no other source of supply, there is no other surface water in the township.

The town of Valley City is located in the SW $\frac{1}{4}$  of sec. 27, it contains one frame house, 30x30 ft. square, the residence of W.P. Hamblen, who is the only settler in this township.

There is no land under cultivation, but preparations were being made at the time of survey to cultivate land in secs. 27, 28, 33 and 34.

The reservoir mentioned above was under course of construction at time of survey.

## GENERAL DESCRIPTION OF T.22 S., R.19 E.

There is no mineral found in this township.

*Harvey D. Grist*  
U. S. Deputy Surveyor.

**Volume**

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**R0349**

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by \_\_\_\_\_

\_\_\_\_\_, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of \_\_\_\_\_

showing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "L", *Chainman.*

*T. 23 S., R. 20 E.* \_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Moundman.*

\_\_\_\_\_, *Moundman.*

\_\_\_\_\_, *Asman.*

\_\_\_\_\_, *Asman.*

\_\_\_\_\_, *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted \_\_\_\_\_

\_\_\_\_\_, United States Deputy Surveyor, in surveying all

those parts or portions of the \_\_\_\_\_

\_\_\_\_\_ of the \_\_\_\_\_

\_\_\_\_\_ meridian, \_\_\_\_\_ of \_\_\_\_\_, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for \_\_\_\_\_

\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Moundman.*

\_\_\_\_\_, *Moundman.*

\_\_\_\_\_, *Asman.*

\_\_\_\_\_, *Asman.*

\_\_\_\_\_, *Flagman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, \_\_\_\_\_, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from \_\_\_\_\_ United States Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 190\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final affidavit see book "L" T. 23 S. R. 20 E.

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 190\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 190\_\_\_\_

The foregoing field notes of the survey of \_\_\_\_\_ the subdivisional lines of Township No. 22 South, Range No. 19 East of the Salt Lake Base and Meridian, Utah, \_\_\_\_\_

executed by Harvey D. Heist and Job H. Winwood under their contract No. 298, dated March 21, 190\_\_\_\_, having critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office

United States Surveyor General

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4-679.

" J "

BOOK A-349

FILED  
SEP 8 1908

# FIELD NOTES

*T.H.*

OF THE SURVEY OF THE

SUBDIVISIONS

of

Township No. 23 South,

Range No. 19 E.

Of the ~~Salt Lake Base~~ and ~~Meridian~~,

in the state of Utah.

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

Under ~~his~~ <sup>their</sup> Contract No. 298, dated March 21, 1907

Survey commenced May 6, 1908

Survey completed May 13, 1908

*high 23-29-27*  
*low 37-65-01*

*61.1438*

NAMES AND DUTIES OF ASSISTANTS.  

---

Manderson W. Houghton, Chainman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

For preliminary affidavits see book "G" T. 23 S., R. 18 E.

BOOK A-349

INDEX DIAGRAM.

Township 23 South, Range 19 East

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19	37	20	27	21	20	22	13	23	5	24
36		35		26		19		12		4
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33		32		25		18		11		3
31	31	32	24	33	17	34	10	35	2	36

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of \_\_\_\_\_

\_\_\_\_\_, Chainman.

\_\_\_\_\_, Chainman.

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, Moundman.

\_\_\_\_\_, Moundman.

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_ do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, Axman

\_\_\_\_\_, Axman

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



I, \_\_\_\_\_, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, Flagman

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



## SUBDIVISIONS OF T.23 S., R.19 E.

Survey commenced, May 6, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit, and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude,  $38^{\circ}46'N.$ , longitude  $109^{\circ}48'W.$ , I set off  $38^{\circ}46'N.$ , on lat. arc,  $16^{\circ}39'N.$ , on decl. arc, and at 3h.57m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone, firmly set in the ground, 5 chs. N. of the cor.

May 6, 1908.

May 7 : At 4h.26m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg, driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris,  $1^{\circ}31'$  to the west, and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. west of the mark determined by the solar.

At 7h.56m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat. arc,  $16^{\circ}50'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station: this mark falls 0.5 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about  $0'26''$

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

east and west of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 8h.15m. a.m. is  $N.15^{\circ}40'W.$ , the angle thus determined gives the mag. decl.  $15^{\circ}40'E.$

From the cor. of secs. 1-2-35 and 36, already described, I run

$N.0^{\circ}01'W.$ , bet. secs. 35 and 36.

Descend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 35 on W. face, 36 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓

77.50 Wash, 20 lks. wide, 5 ft. deep, course SE.

Ascend .

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked T 23 S S 25 on NW.,

R 19 E S 36 on SE.,

S 35 on SW., and

S 26 on NW. face, with 1 notch on S. and E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land, covered with dense undergrowth on 80.00 chs.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

- S. 89° 57' E., on a random line, bet. secs. 25 and 36.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.92 Intersect E. bdy. of Tp., 5 lks. S. of the cor. of secs. 25-30-31 and 36, heretofore described.
- Thence I run
- N. 89° 59' W., on a true line,
- Bet. secs. 25 and 36.
- Descend over rolling land, through dense undergrowth.
- 39.96 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 25 on N. face, 36 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 79.92 The cor. of secs. 25-26-35 and 36.
- Land, rolling.
- Soil, clay, 2nd. rate.
- No timber.
- Undergrowth, sage and greasewood.
- Land, covered with dense undergrowth on 79.92 chn.
- 
- N. 0° 01' W., bet. secs. 25 and 26.
- Ascend over rolling land, through dense undergrowth.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 26 on W. face, 25 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked T 23 S S 24 on NE.,
- R 19 E S 25 on SE.,
- S 26 on SW., and
- S 23 on NE. face, with 2 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft.

SUBDIVISIONS OF T. 23 S., R. 19 E.

CHAINS

dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

May 7 : At this cor. I set off  $16^{\circ}52'N.$ , on decl. arc, and at 11h.56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}48'N.$

$S.89^{\circ}59'E.$ , on a random line, bet. secs. 24 and 25.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.90 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.

Thence I run

$N.89^{\circ}58'W.$ , on a true line,

Bet. secs. 24 and 25.

Ascend through dense undergrowth.

2.00 Begin abrupt ascent, bears NW. and SE.

6.00 Ridge, bears NW. and SE.

Descend over rolling land.

39.95 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 24 on N. face, 25 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

79.90 The cor. of secs. 23-24-25 and 26.

Land, rolling and mountainous.

Soil, clay, 2nd. and 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 79.90 chs.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

N.0°01'W., bet. secs. 23 and 24.

Ascend over rolling land.

40.00 Set a sandstone, 18x10x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 18x9x5 ins., 12 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked with 3 notches on S. and 1 notch on E. edges, and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

S.89°58'E., on a random line, bet. secs. 13 and 24.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect E. bdy. of Tp., 7 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.

Thence I run

S.89°59'W., on a true line,

Bet. secs. 13 and 24.

Gradual ascent, through dense undergrowth.

19.50 Road, from Moab to Thompsons, bears NW. and SE.

34.50 Telephone line, between Moab and Thompsons, bears NW. and SE.

40.01 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pitn impracticable.

40.30 Begin abrupt ascent, bears NW. and SE.

44.50 Ridge, bears NW. and SE.

Descend over rolling land.

80.02 The cor. of secs. 13-14-23 and 24.

44.50 Land, rolling and mountainous.

Soil, sandy loam, 1st. rate ; clay, 2nd. and 3rd. rate.

No timber.

80.02

44.50

35-92

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or  
mountainous land on 44.50 chs.

May 7, 1908.

May 8 : At 7h.56m., a.m., l.m.t., I set off  $38^{\circ}49'N.$ , on  
lat. arc,  $17^{\circ}07'N.$ , on decl. arc, and determine a meridian  
with the solar, at the cor. of secs. 13-14-23 and 24.

Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 13 and 14.

Ascend over rolling land.

- 40.00 Set a sandstone,  $18 \times 12 \times 3$  ins., 12 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits,  $18 \times 18 \times 12$  ins., N. and  
S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft.  
base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 60.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 64.60 Foot of abrupt descent, bears NW. and SE.  
Gradual descent, through dense undergrowth.
- 80.00 Set a sandstone,  $18 \times 6 \times 6$  ins., 12 ins. in the ground, for  
cor. of secs. 11-12-13 and 14, marked with 4 notches on S.  
and 1 notch on E. edge, dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  
 $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft.  
high, W. of cor.
- Land, rolling and mountainous.  
Soil, clay, 2nd. and 3rd. rate ; sandy loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or  
mountainous land on 20.00 chs.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
	N.89°59'E., on a random line, bet.secs.12 and 13.
40.00	Set temp. $\frac{1}{4}$ sec.cor.
80.08	Intersect E.bdy.of Tp., 5 lks.N.of the cor.of secs. 7-12-13 and 18, heretofore described.
	Thence I run
	N.89°59'W., on a true line,
	Bet.secs.12 and 13.
	Descend over rocky and mountainous land.
1.50	Hollow, 75 ft.deep, course N.
	Abrupt ascent.
11.20	Rocky spur, projects N.
	Abrupt descent.
25.00	Foot of abrupt descent, bears NW.and SE.
	Gradual descent.
27.00	Wash, 30 lks.wide, 5 ft.deep, course SE.
	Gradual ascent.
40.04	Set a lava stone, 20x10x4 ins., 15 ins.in the ground, for $\frac{1}{4}$ sec.cor., marked $\frac{1}{4}$ on N.face, and raise a mound of stone, 2 ft.base, $1\frac{1}{2}$ ft.high, N.of cor.
	Pits impracticable.
64.50	Road, from Moab to Thompsons, bears NW.and SE.
77.70	Telephone line, from Moab to Thompsons, bears NW.and SE.
80.08	The cor.of secs.11-12-13 and 14.
$\frac{25}{55.08}$	Land, mountainous and rolling.
	Soil, rocky, 3rd.rate.; sandy, 2nd.rate.
	No timber.
	Mountainous land on 25.00 chs.
	N.0°01'W., bet.secs.11 and 12.
	Gradual descent.
4.50	Telephone line, between Moab and Thompsons, bears NW.and SE.
24.50	Road, from Moab to Thompsons, bears NW.and SE.
40.00	Set a sandstone, 12x12x3 ins., 8 ins.in the ground, for $\frac{1}{4}$

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

42.50 Wash, 30 lks. wide, 5 ft. deep, course SE. Gradual ascent.

60.00 Begin abrupt ascent over rocky land.

69.50 Rocky ridge, bears NW. and SE. Abrupt descent.

80.00 Set a lava stone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

$\frac{40}{60}$

Pits impracticable. Land, rolling and mountainous. Soil, sandy loam, 1st. rate : rocky, 3rd. rate. No timber.

Mountainous land on 20.00 chs. May 8 : At this cor. I set off  $17^{\circ}09'N.$ , on decl. arc, and at 11h. 56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}50'N.$

$S.89^{\circ}59'E.$ , on a random line, bet. secs. 1 and 12.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect E. bdy. of Tp., 7 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run  $S.89^{\circ}58'W.$ , on a true line, Bet. secs. 1 and 12.

Abrupt descent over rocky and mountainous land, through scattering cedar and pinon timber.

3.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

## SUBDIVISIONS OF T. 23 S., R. 19 E.

CHAINS	
9.00	Rocky spur, projects SW. Abrupt descent.
22.50	Hollow, 100 ft. deep, course SW. Abrupt ascent.
29.50	Rocky spur, projects SW. Abrupt descent.
32.50	Foot of mountain, bears NW. and SE. Leave timber. Gradual descent, through dense undergrowth.
39.99	Set a sandstone, 15x8x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
75.00	Begin abrupt ascent, bears NW. and SE.
79.98	The cor. of secs. 1-2-11 and 12. Land, mountainous and rolling. Soil, rocky, 3rd. and 4th. rate; sandy, 2nd. rate. No timber. Undergrowth, greasewood. Land covered with dense undergrowth or mountainous land on 79.98 chs.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
83.14	Intersect N. bdy. of Tp., 3 lks. E. of the cor. of secs. 1-2-35 and 36, heretofore described. Thence I run S. 0° 02' E., on a true line, Bet. secs. 1 and 2.
43.14	Descend abruptly over broken sandstone ledges and mountainous land. Set a sandstone, 15x7x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

Pits impracticable.

46.00 Foot of abrupt descent, bears NW. and SE.

Gradual descent, through dense undergrowth.

50.00' Wash, 25 lks. wide, 6 ft. deep, course W.

76.00 Begin abrupt ascent, bears NW. and SE.

83.14 The cor. of secs. 1-2-11 and 12.

Land, mountainous and rolling.

Soil, rocky 3rd. and 4th. rate; sandy, 2nd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 83.14 chs.

May 8, 1908.

May 9 : At 6h. 56m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat. arc,  $17^{\circ}23'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 2-3-34 and 35, heretofore described on the S. bdy. of the Tp.

Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 34 and 35.

Descend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 34 on W. face, 35 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 26-27-34 and 35, marked T 23 S S 26 on NE.,

R 19 E S 35 on SE.,

S 34 on SW., and

S 27 on NW. face, with 1 notch on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high,

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

W. of cor.  
 Land, rolling.  
 Soil, clay, 2nd. rate.  
 No timber.  
 Undergrowth, greasewood and sage.  
 Land covered with dense undergrowth on 80.00 chs.

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S. 89° 57' E., on a random line, bet. secs. 26 and 35.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 25-26-35 and 36.

Thence I run

N. 89° 55' W., on a true line,  
 Bet. secs. 26 and 35.

Ascend over rolling land, through dense undergrowth.

40.03 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 26 on N. face, 35 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

80.06 The cor. of secs. 26-27-34 and 35.

Land, rolling.  
 Soil, clay, 2nd. rate.  
 No timber.  
 Undergrowth, greasewood and sage.  
 Land covered with dense undergrowth on 80.06 chs.

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N. 0° 01' W., bet. secs. 26 and 27.

Descend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 27 on W. face, 26 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked T 23 S S 23 on NE., R 19 E S 26 on SE., S 27 on SW., and S 22 on NW. face, with 2 notches on S. and E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling. Soil, clay, 2nd. rate. No timber.

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- 40.00 S. 89°55'E., on a random line, bet. secs. 23 and 26. Set temp. ¼ sec. cor.
- 79.96 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 23-24-25 and 26. Thence I run N. 89°54'W., on a random line, Bet. secs. 23 and 26. Descend over rolling land.
- 34.50 Wash, 50 lks. wide, 5 ft. deep, course NW. Begin ascent over rolling land.
- 39.98 Set a charred cottonwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 23 on N. face, 26 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor. ✓
- 79.96 The cor. of secs. 22-23-26 and 27. Land, rolling. Soil, clay, 2nd. rate. No timber.

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## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

N.0°01'W., bet.secs.22 and 23.

Descend over rolling land.

40.00 Set a charred cottonwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 22 on W. face, 23 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

42.00 Wash, 30 lks. wide, 4 ft. deep, course NW.

Begin rolling ascent.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked T 23 S S 14 on NE.,  
R 19 E S 23 on SE.,  
S 22 on SW., and  
S 15 on NW. face, with 3 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

S.89°54'E., on a random line, bet.secs.14 and 23.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.00 Intersect N. and S. line, 19 lks. S. of the cor. of secs. 13-14-23 and 24.

Thence I run

S.89°58'W., on a true line,

Bet.secs.14 and 23.

Descend over rolling land.

40.00 Set a redwood post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 14 on N. face, 23 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

high, N. of cor. ✓

80.00 The cor. of secs. 14-15-22 and 23.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

May 9 : At this cor. I set off  $17^{\circ}25'N.$ , on decl. arc, and at 11h. 56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $39^{\circ}49'N.$

$N.0^{\circ}01'W.$ , bet. secs. 14 and 15.

Ascend over rolling land.

40.00

Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 15 on W. face, 14 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓

80.00

Set a sandstone, 24x9x3 ins., 18 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked with 4 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist, and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

$N.89^{\circ}58'E.$ , on a random line, bet. secs. 11 and 14.

40.00

Set temp.  $\frac{1}{4}$  sec. cor.

79.94

Intersect N. and S. line, 14 lks. N. of the cor. of secs. 11-12-13 and 14.

Thence I run

$N.89^{\circ}56'W.$ , on a true line,

Bet. secs. 11 and 14.

Gradual ascent.

12.75

Begin abrupt ascent, bears NW. and SE.

SUBDIVISIONS OF T.23 S.,R.19 E.

CHAINS	
16.25	Ridge, bears NW. and SE. Descend over rolling land.
39.97	Set a sandstone, 18x10x3 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
79.94	The cor. of secs. 10-11-14 and 15.
3.50	Land, rolling and mountainous.
76.44	Soil, clay, 2nd. rate; loam, 1st. rate.
	No timber.
	Mountainous land on 3.50 chs.
	N. 0° 01' W., bet. secs. 10 and 11.
	Ascend over rolling land.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 10 on W. face, 11 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked T 23 S S 2 on NE.,
	R 19 E S 11 on SE.,
	S 10 on SW., and
	S 3 on NW face, with 5 notches on S. and 2 notches on
	E. edges, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.,
	and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, rolling.
	Soil, clay, 2nd. rate.
	No timber.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
	S.89°56'E., on a random line, bet. secs. 2 and 11.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.98	Intersect N. and S. line, 7 lks. S. of the cor. of secs. 1-2-11 and 12.
	Thence I run N.89°59'W., on a true line, Bet. secs. 2 and 11.
	Ascend abruptly over rocky and mountainous land.
6.00	Rocky ridge, bears NW. and SE. Abrupt descent.
15.50	Foot of abrupt descent, bears NW. and SE. Gradual descent.
21.75	Wash, 10 lks. wide, 3 ft. deep, course SE. Gradual ascent.
34.00	Road from Moab to Thompsons, bears NW. and SE.
39.99	Set a lava stone, 18x8x8 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
40.12	Telephone line, between Moab and Thompsons, bears NW. and SE.
67.00	Begin abrupt ascent, bears NW. and SE.
72.10	Ridge, bears NW. and SE. Descend over rolling land.
79.98	The cor. of secs. 2-3-10 and 11.
20.60 59-38	Land, mountainous and rolling. Soil, rocky, 3rd. rate; clay, 2nd. rate; loam, 1st. rate. No timber. Mountainous land on 20.60 chs. N.0°01'W., on a random line, bet. secs. 2 and 3.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
83.10	Intersect N. bdy. of Tp., 5 lks. W. of the cor. of secs. 2-3-34 and 35, heretofore described. Thence I run

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

- S.0°01'W., on a true line,  
Bet. secs. 2 and 3.  
Gradual descent over rolling land.
- 8.60 Telephone line, between Moab and Thompsons, bears NW. and SE.
- 16.50 Road, from Moab to Thompsons, bears NW. and SE.
- 27.60 Wash, 25 lks. wide, 5 ft. deep, course SE.
- 43.10 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 64.75 Begin abrupt ascent, bears NW. and SE.
- 69.10 Ridge, bears NW. and SE.  
Descend over rolling land.
- 83.10 The cor. of secs. 2-3-10. and 11.  
4.35 Land, rolling and mountainous.  
78-75 Soil, loam, 1st. rate : clay, 2nd. and 3rd. rate.  
No timber.  
Mountainous land on 4.35 chs.
- May 9, 1908.
- May 10 : At 6h. 56m., a.m., .l.m.t., I set off 38°46'N., on lat. arc, 17°38'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 3-4-33 and 34, heretofore described on the S. bdy. of the Tp.  
Thence I run  
N.0°02'W. bet. secs. 33 and 34.  
Ascend over mountainous land.
- 17.00 Spur, projects W.  
Abrupt descent.
- 26.00 Hollow, 7 5 ft. deep, course W.  
Abrupt ascent.
- 30.50 Ridge, bears NW. and SE.  
Descend over rolling land, through dense undergrowth.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 33 on W. face, 34 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked T 28 S S 27 on NE.,  
R 19 E S 34 on SE.,  
S 33 on SW., and  
S 28 on NW. face, with 1 notch on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓  
Land, rolling and mountainous.  
Soil, clay, 2nd. and 3rd. rate.  
No timber.  
Undergrowth, sage and greasewood.  
Land covered with dense undergrowth or mountainous land on 80.00 chs.
- S,  $89^{\circ}57'E.$ , on a random line, bet. secs. 27 and 34.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.02 Intersect the cor. of secs. 26-27-34 and 35.  
Thence I run  
N.  $89^{\circ}57'W.$ , on a true line,  
Bet. secs. 27 and 34.  
Ascend over rolling land, through dense undergrowth.
- 40.01 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 27 on N. face, 34 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓
- 80.02 The cor. of secs. 27-28-33 and 34. ✓  
Land, rolling.  
Soil, clay, 2nd. rate.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.02 chs.

N.0°02'W., bet. secs. 27 and 28.

Descend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 28 on W. face, 27 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked T 23 S S 22 on NE.,  
R 19 E S 27 on SE.,  
S 28 on on SW., and  
S 21 on NW. face, with 2 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist, and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.  
Soil, clay, 2nd. rate.  
No timber.

S.89°57'E., on a random line, bet. secs. 22 and 27.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.10 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 22-23-26 and 27.

Thence I run

N.89°59'W., on a true line,

Bet. secs. 22 and 27.

Descend over rolling land.

40.05 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 22 on N. face, 27 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

dist, and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high,  
N. of cor.

74.00 Wash, 30 lks. wide, 4 ft. deep, course N.

Begin rolling ascent.

80.10 The cor. of secs. 21-22-27 and 28.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

N.  $0^{\circ}02'W.$ , bet. secs. 21 and 22.

Descend over rolling land.

14.25 Wash, 30 lks. wide, 5 ft. deep, course NW.

Begin rolling ascent.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone,  
24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 21 on W.  
face, 22 on E. face, dig pits, 18x18x12 ins., N. and S. of post,  
3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft.  
high, W. of cor.

61.50 Wash, 25 lks. wide, 5 ft. deep, course NW.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24  
ins. in the ground, for cor. of secs. 15-16-21 and 22, marked  
T 23 S S 15 on NE.,  
R 19 E S 22 on SE.,  
S 21 on SW., and  
S 16 on NW. face, with 3 notches on S. and E. edges, dig pits,  
18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound  
of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling.

Soil, clay, 2nd. rate.

No timber.

## SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
	S. $89^{\circ}59'E.$ , on a random line, bet. secs. 15 and 22.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.06	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 14-15-22 and 23.
	Thence I run
	N. $89^{\circ}56'W.$ , on a true line,
	Bet. secs. 15 and 22.
	Descend over rolling land.
17.00	Wash, 12 lks. wide, 3 ft. deep, course SW.
40.03	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 15 on N. face, 22 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor. ✓
80.06	The cor. of secs. 15-16-21 and 22.
	Land, rolling.
	Soil, clay, 2nd. rate.
	No timber.
	May 10 : At this cor. I set off $17^{\circ}40'N.$ , on decl. arc, and at 11h. 56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is $38^{\circ}49'N.$
	N. $0^{\circ}02'W.$ , bet. secs. 15 and 16.
	Ascend over rolling land.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 16 on W. face, 15 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor. ✓
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked T.23 S S 10 on NE., R 19 E S 15 on SE., S 16 on SW., and

## SUBDIVISIONS OF T.25 S., R.19 E.

CHAINS S 9 on NW. face, with 4 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling.  
Soil, loam, 1st. rate.  
No timber.

S.  $89^{\circ}56'$  E., on a random line, bet. secs. 10 and 15.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 10-11-14 and 15.

Thence I run

N.  $89^{\circ}58'$  W., on a true line,

Bet. secs. 10 and 15.

Descend over rolling land.

40.01 Set a sandstone, 24x14x3 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.02 The cor. of secs. 9-10-15 and 16.

Land, rolling.

Soil, clay, 2nd. rate : loam, 1st. rate.

No timber.

N.  $0^{\circ}02'$  W., bet. secs. 9 and 10.

Ascend over rolling land.

35.25 Wash, 20 lks. wide, 5 ft. deep, course NW.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 9 on W. face, 10 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, E. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

T. 23 S S 3 on NR.,

R. 19 E S 10 on SE.,

S. 9 on SW., and

S. 4 on NW. face, with 5 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

S. 89°58'E., on a random line, bet. secs. 3 and 10.

40.00 Set temp. ¼ sec. cor.

79.96 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 2-3-10 and 11.

Thence I run

N. 89°56'W., on a true line,

Bet. secs. 3 and 10.

Descend over rolling land.

39.98 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S. 3 on N. face, 10 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

79.96 The cor. of secs. 3-4-9 and 10.

Land, rolling.

Soil, clay, 2nd. rate : loam, 1st. rate.

No timber.

N. 0°02'W., on a random line, bet. secs. 3 and 4.

40.00 Set temp. ¼ sec. cor.

82.91 Intersect N. bdy. of Tp., 5 lks. E. of the cor. of secs. 3-4-33 and 34, heretofore described.

Thence I run

S. 0°04'E., on a true line,

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

Bet. secs. 3 and 4.

Gradual descent.

42.91 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 4 on W. face, 3 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

52.00 Wash, 50 lks. wide, 5 ft. deep, course SW.

67.65 Road, bears NE and SW.

82.91 The cor. of secs. 3-4-9 and 10.

Land, sloping south.

Soil, loam, 1st. rate.

No timber.

May 10, 1908.

May 11 : At 6h. 56m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat. arc,  $17^{\circ}54'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 4-5-32 and 33, heretofore described on the S. bdy. of the Tp.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 32 and 33.

Descend abruptly over rocky and mountainous land.

4.50 Hollow, 100 ft. deep, course NE.

Abrupt ascent.

11.00 Rocky spur, projects NE.

Abrupt descent.

19.00 Foot of abrupt descent, bears NW. and SE.

Gradual descent through dense undergrowth.

40.00 Set a lava stone, 20x8x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

77.00 Begin abrupt ascent, bears NW. and SE.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
80.00	<p>Set a sandstone, 28x10x3 ins., 21 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked with 1 notch on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.</p> <p>Land, mountainous and rolling.</p> <p>Soil, rocky, 3rd. rate; clay, 2nd. rate; loam, 1st. rate.</p> <p>No timber.</p> <p>Undergrowth, greasewood and sage.</p> <p>Land covered with dense undergrowth or mountainous land on 80.00 chs.</p>
	<p>S. 89°57'E., on a random line, bet. secs. 28 and 33.</p>
40.00	<p>Set temp. ¼ sec. cor.</p>
80.04	<p>Intersect N. and S. line, 9 lks. S. of the cor. of secs. 27-28-33 and 34.</p>
	<p>Thence I run</p>
	<p>S. 89°59'W., on a true line,</p>
	<p>Bet. secs. 28 and 33.</p>
	<p>Ascend over rolling land, through dense undergrowth.</p>
40.02	<p>Set a limestone, 20x7x4 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.</p>
	<p>Pits impracticable.</p>
53.80	<p>Ridge, bears NW. and SE.</p>
	<p>Descend abruptly along steep south slope.</p>
80.04	<p>The cor. of secs. 28-29-32 and 33.</p>
	<p>Land, rolling and mountainous.</p>
	<p>Soil, clay, 2nd. rate.</p>
	<p>No timber.</p>
	<p>Undergrowth, greasewood and sage.</p>
	<p>Land covered with dense undergrowth or mountainous land on 80.04 chs.</p>

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

N.0°03'W., bet.secs.28 and 29.

Ascend abruptly over mountainous land.

12.50 Ridge, bears NW. and SE.

Descend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 29 on W. face, 28 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked T 23 S S 21 on NE.,

R 19 E S 28 on SE.,

S 29 on SW., and

S 20 on NW. face, with 2 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, clay, 2nd. rate.

No timber.

Mountainous land on 80.00 chs.

N.89°59'E., on a random line, bet.secs.21 and 28.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.08 Intersect N. and S. line, 3 lks. N. of the cor. of secs, 21-22-27 and 28.

Thence I run, West, on a true line,

Bet.secs.21 and 28.

Ascend over rolling land.

40.04 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 21 on N. face, 28 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft.

## SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
	high, N. of cor.
80.08	The cor. of secs. 20-21-28 and 29. Land, rolling. Soil, clay, 2nd. rate. No timber.
	N. 0° 03' W., bet. secs. 20 and 21.
	Descend over rolling land.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 20 on W. face, 21 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
75.00	Wash, 15 lks. wide, 5 ft. deep, course NW. Begin rolling ascent.
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked T 23 S S 16 on NE., R 19 E S 21 on SE., S 20 on SW., and S 17 on NW. face, with 3 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling. Soil, loam, 1st. rate. No timber.
	East, on a random line, bet. secs. 16 and 21.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 15-16-21 and 22. Thence I run N. 89° 59' W., on a true line, Bet. secs. 16 and 21.

## SUBDIVISIONS OF T. 23 S., R. 19 E.

## CHAINS

Descend over rolling land.

40.02 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S. 16 on N. face, 21 on S. face, dig pits, 18x18x12 ins., N. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓

80.04 The cor. of secs. 16-17-20 and 21.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

May 11: At this cor. I set off  $17^{\circ}56'N.$ , on decl. arc, and at 11h. 56m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}49'N.$

N.  $0^{\circ}03'W.$ , bet. secs. 16 and 17.

Ascend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 17 on W. face, 16 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓

66.50 Road, bears NE. and SW.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked T 23 S S 9 on NE.,

R 19 E S 16 on SE.,

S 17 on SW., and

S 8 on NW. face, with 4 notches on S and E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓

Land, rolling.

Soil, loam, 1st. rate.

No timber.

## SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
	S.89°59'E., on a random line, bet. secs. 9 and 16.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 9-10-15 and 16.
	Thence I run
	N.89°58'W., on a true line, bet. secs. 9 and 16.
	Gradual descent over rolling land.
40.02	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 9 on N. face, 16 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
71.25	Road, bears NE. and SW.
80.04	The cor. of secs. 8-9-16 and 17.
	Land, rolling.
	Soil, loam, 1st. rate.
	No timber.
	N.0°03'W., bet. secs. 8 and 9.
	Gradual ascent over rolling land.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 8 on W. face, 9 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
47.00	Wash, 30 lks. wide, 12 ft. deep, course SW.
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked T 23 S S 4 on NE., R 19 E S 9 on SE., S 8 on SW., and S 5 on NW. face, with 5 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., $5\frac{1}{2}$ ft. dist.,

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, rolling.  
 Soil, loam, 1st. rate.  
 No timber.

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S. 89° 58' E., on a random line, bet. secs. 4 and 9.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 3-4-9 and 10.

Thence I run

N. 89° 57' W., on a true line, bet. secs. 4 and 9.

Descend over rolling land.

13.25 Road, bears NE. and SW.

22.00 Enter dense undergrowth, bears N. and S.

38.50 Wash, 25 lks. wide, 6 ft. deep, course SW.

40.03 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 4 on N. face, 9 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3  $\frac{1}{2}$  ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.

51.75 Wash, 30 lks. wide, 7 ft. deep, course SW.

53.00 Leave dense undergrowth.

80.06 The cor. of secs. 4-5-8 and 9.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood.

Dense undergrowth on 31.00 chs.

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N. 0° 03' W., on a random line, bet. secs. 4 and 5.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

82.89 Intersect N. bdy. of Tp., 3 lks. W. of the cor. of secs. 4-5-32 and 33, heretofore described.

Thence I run

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

S.0°02'E., on a true line,  
Bet. secs. 4 and 5.

Gradual descent, through dense undergrowth.

42.89 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S. 5 on W. face, 4 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. ✓

52.00 Leave dense undergrowth.

82.89 The cor. of secs. 4-5-8 and 9. ✓

52  
30.89

Land, sloping south.  
Soil, loam.  
No timber.  
Undergrowth, greasewood.

Land, covered with dense undergrowth on 52.00 chs.

May 11, 1908.

May 12 : At 6h.56m., a.m., l.m.t., I set off 38°46'N., on lat. arc, 18°09'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 5-6-31 and 32, heretofore described on the S. bdy. of the Tp. Thence I run

N.0°03'W., bet. secs. 31 and 32.

Descend abruptly over rocky and mountainous land.

9.00 Hollow, 75 ft. deep, course NW.

Abrupt ascent.

20.00 Rocky spur, projects W.

Abrupt descent.

26.00 Hollow, 100 ft. deep, course W.

Abrupt ascent.

27.70 Rocky spur, projects W.

Abrupt descent.

40.00 Set a lava stone, 15x11x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor. ✓

Pits impracticable.

50.00 Hollow, 100 ft. deep, course NE.

Ascend.

58.25 Rocky spur, projects NE.

Abrupt descent.

64.50 Enter bottom of wide hollow, course NW.

Over level sandy land, through dense undergrowth.

80.00 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for cor.

of secs. 29-30-31 and 32, marked with 1 notch on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓

Land, mountainous and level.

Soil, rocky, 3rd. and 4th. rate : sandy, 3rd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

S.  $89^{\circ}57'$  E., on a random line, bet. secs. 29 and 32.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 28-29-32 and 33.

Thence I run

N.  $89^{\circ}58'$  W., on a true line, ✓

Bet. secs. 29 and 32.

Descend over mountainous land.

10.00 Foot of abrupt descent, bears NW. and SE.

Over level land, through dense undergrowth.

26.75 Begin abrupt ascent, bears NW. and SE.

39.98 Set a lava stone, 15x12x9 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. ✓

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
	Pits impracticable.
56.00	Rocky ridge, bears NW. and SE. Abrupt descent.
74.00	Foot of abrupt descent, bears NW. and SE. Over level sandy land, through dense undergrowth.
79.96	The cor. of secs. 29-30-31 and 32. ✓ Land, mountainous and level. Soil, rocky, 3rd. and 4th. rate; sandy and clay, 3rd. rate. No timber. Undergrowth, greasewood. Land covered with dense undergrowth or mountainous land on 79.96 chs.
	_____
	N. 89° 57' W., on a random line, bet. secs. 30 and 31.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
96.11	Intersect W. bdy. of Tp., 5 lks. N. of the cor. of secs. 25-30-31 and 36, heretofore described. Thence I run S. 89° 59' E., on a true line, Bet. secs. 30 and 31. Ascend over broken sandstone ledges, and scattering cedar and pinon timber.
23.50	Begin abrupt ascent, bears NE. and SW.
28.00	SW. point of bluff, 200 ft. high, bears NE. about 50.00 chs. Abrupt descent.
45.00	Foot of abrupt descent, bears NE. and SW. Descend over broken and rocky land,
56.11	Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. ✓ Pits impracticable.
74.00	Foot of abrupt descent, bears NW. and SE. Over level sandy land, through dense undergrowth.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS	
96.11	<p>The cor. of secs. 29-30-31 and 32. ✓</p> <p>Land, mountainous and level.</p> <p>Soil, rocky, 3rd. and 4th. rate.</p> <p>Timber, cedar and pinon.</p> <p>Undergrowth greasewood.</p> <p>Land covered with dense undergrowth or mountainous land on 96.11 chs.</p>
	<p>N. 0° 03' W., bet. secs. 29 and 30.</p>
4.00	<p>Over level sandy land, through dense undergrowth.</p> <p>Begin abrupt ascent over rocky land, bears E. and W.</p>
6.15	<p>Rocky spur, projects W.</p> <p>Abrupt descent.</p>
11.00	<p>Foot of abrupt descent, bears NE. and SW.</p> <p>Gradual descent over rolling land, through dense undergrowth.</p>
40.00	<p>Set a sandstone, 18x14x5 ins., 12 ins. in the ground, for <math>\frac{1}{4}</math> sec. cor., marked <math>\frac{1}{4}</math> on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3<math>\frac{1}{2}</math> ft. base, 1<math>\frac{1}{2}</math> ft. high, W. of cor. ✓</p>
41.50	<p>Begin abrupt ascent, bears NE. and SW.</p>
46.00	<p>Rocky spur, projects NE.</p> <p>Abrupt descent.</p>
52.00	<p>Foot of abrupt descent, bears NW. and SE.</p> <p>Over level land, through dense undergrowth.</p>
80.00	<p>Set a limestone, 18x10x3 ins., 12 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked with 2 notches on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5<math>\frac{1}{2}</math> ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓</p> <p>Land, mountainous, rolling and level.</p> <p>Soil, rocky, 3rd. and 4th. rate. : sandy, 2nd. and 3rd. rate.</p> <p>No timber.</p> <p>Undergrowth, greasewood.</p>

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

Land covered with dense undergrowth or mountainous land on 80.00 chs.

May 12: At this cor. I set off  $18^{\circ}11'N.$ , on decl. arc, and at 11h.56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}48'N.$

$S.89^{\circ}58'E.$ , on a random line, bet. secs. 20 and 29.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 20-21-28 and 29.

Thence I run

$S.89^{\circ}59'W.$ , on a true line,

Bet. secs. 20 and 29.

Ascend over rolling land.

20.00 Wash, 15 lks. wide, 5 ft. deep, course NW.

40.02 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 20 on N. face, 29 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

59.00 Ridge, bears NW. and SE.

Abrupt descent.

65.00 Foot of abrupt descent, bears NW. and SE.

Over level land, through dense undergrowth.

80.04 The cor. of secs. 19-20-29 and 30.

Land, rolling, mountainous and level.

Soil, clay, 2nd. and 3rd. rate; sandy, 2nd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.04 chs.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

- N.89°59'W., on a random line, bet. secs. 19 and 30.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 96.01 Intersect W. bdy. of Tp., 6 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.
- Thence I run
- N.89°59'E., on a true line,
- Bet. secs. 19 and 30.
- Ascend through dense undergrowth.
- 0.50 Wash, 50 lks. wide, 5 ft. deep, course SW.
- 1.75 Road, bears NE. and SW.
- Abrupt ascent over rocky land, bears NE. and SW.
- 3.50 Rocky spur, projects N.
- Abrupt descent.
- 5.00 Enter hollow, 100 ft. deep, course NW.
- 14.00 Leave hollow, begin abrupt ascent, bears NW. and SE.
- 36.00 Rocky spur, projects S.
- Abrupt descent.
- 51.00 Hollow, 100 ft. deep, course S.
- Ascend.
- 56.01 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. ✓
- Pits impracticable.
- 63.60 Rocky spur, projects S.
- Abrupt descent.
- 69.00 Foot of abrupt descent, bears N. and S.
- Over level land, through dense undergrowth.
- 96.01 The cor. of secs. 19-20-29 and 30. ✓
- Land, mountainous and level.
- Soil, rocky, 3rd. and 4th. rate: sandy, 2nd. and 3rd. rate.
- No timber.
- Undergrowth, greasewood and sage.
- Land covered with dense undergrowth or mountainous land on 96.01 chs.

SUBDIVISIONS OF T. 23 S., R. 19 E.

CHAINS

N. 0° 03' W., bet. secs. 19 and 20.

Ascend over rolling land.

13.75 Begin abrupt ascent, bears NW. and SE.

18.70 Spur, projects W.

Abrupt descent.

22.00 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

24.50 Ridge, bears NW. and SE.

Descend over rolling land.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 19 on W. face, 20 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3  $\frac{1}{2}$  ft. base, 1  $\frac{1}{2}$  ft. high, W. of cor.

80.00  
10.75  
69.25

Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked

T 23 S S 17 on NE.,

R 19 E S 20 on SE.,

S 19 on SW., and

S 18 on NW. face, with 3 notches on S. and 5 notches on E.

edges, dig pits, 18x18x12 ins., in each sec., 5  $\frac{1}{2}$  ft. dist.,

and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, rolling and mountainous.

Soil, clay, 2nd. and 3rd. rate.

No timber.

Mountainous land on 10.75 chs.

N. 89° 59' E., on a random line, bet. secs. 17 and 20.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.92 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 16-17-20 and 21.

Thence I run

N. 89° 58' W., on a true line,

## SUBDIVISIONS OF T. 23 S., R. 19 E.

## CHAINS

Bet. secs. 17 and 20.

Ascend over rolling land,

- 8.50 Wash, 15 lks. wide, 5 ft. deep, course NW.
- 39.06 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 17 on N. face, 20 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 79.02 The cor. of secs. 17-18-19 and 20.  
Land rolling.  
Soil, loam, 1st. rate.  
No timber.
- 
- S. 89°59'W., on a random line, bet. secs. 18 and 19.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 95.86 Intersect W. bdy. of Tp., 6 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.  
Thence I run  
S. 89°59'E., on a true line,  
Bet. secs. 18 and 19.  
Over level land.
- 2.00 Wash, 50 lks. wide, 2 ft. deep, course SW.
- 22.00 Begin abrupt ascent, bears NW. and SE.
- 26.00 Ridge, bears NW. and SE.  
Descend over rolling land.
- 55.86 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 18 on N. face, 19 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 92.75 Road, bears NE. and SE.
- 95.86 The cor. of secs. 17-18-19 and 20.  
Land, rolling, mountainous and level.  
Soil, clay, 2nd. rate : loam, 1st. rate.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

No timber.

Mountainous land on 4.00 chs.

May 12, 1908.

May 13 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}49'N.$ , on lat. arc,  $18^{\circ}24'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 17-18-19 and 20.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 17 and 18.

Gradual ascent over rolling land.

- 1.15 Road, bears NE. and SW.
- 16.25 Wash, 50 lks. wide, 6 ft. deep, course W.
- 40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 18 on W. face, 17 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked T 23 S S 8 on NE., R 19 E S 17 on SE., S 18 on SW., and S 7 on NW. face, with 4 notches on S. and 5 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, rolling.
- Soil, loam, 1st. rate.
- No timber.
- S.  $89^{\circ}58'E.$ , on a random line, bet. secs. 8 and 17.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.94 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 8-9-16 and 17.

## SUBDIVISIONS OF T.23 S., R.19 E.

## CHAINS

Thence I run

N.89°59'W., on a true line,

Bet. secs. 8 and 17.

Gradual descent over rolling land.

39.97 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 8 on N. face, 17 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. ✓

45.50 Wash, 20 lks. wide, 12 ft. deep, course SW.

79.94 The cor. of secs. 7-8-17 and 18. ✓

Land rolling.

Soil, loam, 1st. rate.

No timber.

N.89°59'W., on a random line, bet. secs. 7 and 18.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

95.75 Intersect W. bdy. of Tp., 4 lks. S. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

S.89°58'E., on a true line,

Bet. secs. 7 and 18.

Gradual ascent over rolling land. ✓

7.50 Wash, 25 lks. wide, 10 ft. deep, course S.

55.75 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 7 on N. face, 18 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. ✓

95.75 The cor. of secs. 7-8-17 and 18. ✓

Land rolling.

Soil, loam, 1st. rate.

No timber.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

N.0°03'W., bet.secs.7 and 8.

Gradual ascent.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 7 on W. face, 8 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor. ✓

40.75 Wash, 20 lks. wide, 8 ft. deep, course SW.

59.00 Enter dense undergrowth.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked  
 $\frac{21}{59}$   
 T 23 S S 5 on NE.,  
 R 19 E S 8 on SE.,  
 S 7 on SW., and  
 S 6 on NW. face, with 5 notches on S. and E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. ✓

Land, sloping south.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth on 21.00 chs.

S.89°59'W., on a random line, bet.secs.5 and 8.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.92 Intersect N. and S. line, 5 lks. N. of the cor. of secs.

4-5-8 and 9.

Thence I run

N.89°57'W., on a true line,

Bet.secs.5 and 8.

Gradual descent.

39.96 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 5 on N. face, 8 on S. face, dig pits, 18x18x12 ins., E. and W. of post.

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor. ✓

66.00 Enter dense undergrowth.

79.92 The cor. of secs. 5-6-7 and 8. ✓

13.92  
~~66.00~~

Land, sloping west.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth on 13.92 chs.

N. 89° 58' W., on a random line, bet. secs. 6 and 7.

40.00 Set temp. ¼ sec. cor.

95.64 Intersect W. bdy. of Tp., 4 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run

S. 89° 57' E., on a true line,

Bet. secs. 6 and 7.

Over level land.

15.00 Wash, 25 lks. wide, 10 ft. deep, course SW.

55.64 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 6 on N. face, 7 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high N. of cor. ✓

66.00 Enter dense undergrowth.

95.64 The cor. of secs. 5-6-7 and 8. ✓

29.64  
~~66.00~~

land, level.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood.

Undergrowth, greasewood.

Land covered with dense undergrowth on 29.64 chs.

May 13 : At this cor. I set off 18° 26' N., on decl. arc, and

SUBDIVISIONS OF T.23 S., R.19 E.

CHAINS

at 11h.56m., a.m., l.m.t., observe the sun on the meridian,  
the resulting lat. is 38°50' N.

N.0°03'W., on a random line, bet. secs. 5 and 6.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

82.83 Intersect N. and S. line, 7 lks. E. of the cor. of secs.  
5-6-31 and 32, heretofore described.

Thence I run

S.0°06'E., on a true line,

Bet. secs. 5 and 6.

Over level land.

42.83 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone,  
24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 6 on W.  
and 5 on E. face, dig pits, 18x18x12 ins., N. and S. of post,  
3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft.  
high, W. of cor.

46.30 Wash, 15 lks. wide, 6 ft. deep, course SW.

69.00 Enter dense undergrowth.

82.83 The cor. of secs. 5-6-7 and 8.

13.83

Land level.

69.00

Soil, loam, 1st rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth on 13.83 chs.

May 13, 1908.

GENERAL DESCRIPTION.

This township is mountainous in the northeastern and  
southwestern portion while the balance of the township  
is rolling or level.

The soil in the mountainous portion is rocky or clay  
and unfit for agriculture, while the balance of the

## GENERAL DESCRIPTION OF T.23 S., R.19 E.

township is clay or loam and capable of producing crops with irrigation.

The only timber found on this township is a scattering growth of cedar and pinon timber in secs. 1, 12 and 31.

There is no surface water on this township.

There are no settlers in this township.

There are no indications of mineral found in this township.

*L. James M. Hunt*  
U. S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by \_\_\_\_\_, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of \_\_\_\_\_

showing the respective capacities in which they acted:

- For list of names and final affidavits of assistants see book "L" T, Chairman. 23 S., R. 20 E. \_\_\_\_\_, Chairman. \_\_\_\_\_, Moundman. \_\_\_\_\_, Moundman. \_\_\_\_\_, Axman. \_\_\_\_\_, Axman. \_\_\_\_\_, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted \_\_\_\_\_, United States Deputy Surveyor, in surveying all

those parts or portions of the \_\_\_\_\_ of the \_\_\_\_\_ meridian, \_\_\_\_\_ of \_\_\_\_\_, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for \_\_\_\_\_

- \_\_\_\_\_ Chairman. \_\_\_\_\_ Chairman. \_\_\_\_\_ Moundman. \_\_\_\_\_ Moundman. \_\_\_\_\_ Axman. \_\_\_\_\_ Axman. \_\_\_\_\_ Flagman.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, \_\_\_\_\_, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from \_\_\_\_\_, United States Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final affidavit see book "L" T. 23 S., R. 20 E.

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, \_\_\_\_\_, 190 \_\_\_\_\_

The foregoing field notes of the survey of \_\_\_\_\_ the subdivisional lines of Town-ship No. 23 South, Range No. 19 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood under ~~his~~ <sup>their</sup> contract No. 298, dated March 21, \_\_\_\_\_, 190 \_\_\_\_\_, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

*Thomas H. Bell*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office

United States Surveyor General

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" K "

BOOK A-349

F.H.

# FIELD NOTES

FILED

SEP 17 1908

OF THE SURVEY OF THE

SUBDIVISIONS

of

Township No. 22 South,

Range No. 20 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

their

under his Contract No. 298, dated March 21, 1907

Survey commenced May 13, 1908

Survey completed May 21, 1908

high 42-18-94

low 17-70-23

6099.17 v

## NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chainman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

For preliminary affidavits see book " G" T. 23 S. R. 18 E.

BOOK A-349

INDEX DIAGRAM.

Township 22 South, Range 20 East

6	49	5	34	4	25	8	17	2	9	1
48		47		33		24		17		8
7	46	6	32	9	24	10	16	11	8	12
45		44		31		23		15		7
18	43	17	31	16	23	15	15	14	6	13
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19	41	20	29	21	21	22	13	28	5	24
40		39		29		20		13		4
20	39	20	28	28	19	27	12	26	3	25
37		36		27		19		11		3
31	35	22	26	23	18	24	10	25	2	30

Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Chainman.*

\_\_\_\_\_, *Chainman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 }



WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Moundman.*

\_\_\_\_\_, *Moundman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 }



WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Axman.*

\_\_\_\_\_, *Axman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 }



I, \_\_\_\_\_, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, *Flagman.*

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 }



SUBDIVISIONS OF T.22 S., R.20 E.

Survey commenced, May 13, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described on the S. bdy. of the Tp., in approximate latitude  $38^{\circ}51'N.$ , longitude  $109^{\circ}42'W.$ , I set off  $38^{\circ}51'N.$ , on lat. arc,  $18^{\circ}29'N.$ , on decl. arc, and at 3h.56m., p.m., l.m.t., determine with the solar a meridian, and mark a point thereof, on a stone, firmly set in the ground, 5 chs. N. of the cor.

May 13, 1908

May 14 : At 4h.03m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg, driven in the ground, 5 chs. N. of my station. At 7 a.m., I lay off the azimuth of Polaris,  $1^{\circ}31'$  to the west, and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. west of the mark determined by the solar.

At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $18^{\circ}39'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station: this mark falls 0.5 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about  $0^{\circ}26''$

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS:

east and west of the meridian established by the Polaris observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetid bearing of the true meridian at 7h.30m. a.m., is N.16°08'W., the angle thus determined gives the mag.decl. 16°08'E.

From the cor.of secs.1-2-35 and 36, heretofore described, I run

N.0°01'W., bet.secs.35 and 36.

Descend over rocky and mountainous land, through scattering timber.

3.00 Leave timber.

10.30 Foot of abrupt descent, bears E. and W.

Over level land, through dense undergrowth.

40.00 Set a lava stone, 15x11x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec.cor., marked  $\frac{1}{4}$  on W.face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

50.00 Begin abrupt ascent, bears E. and W.

53.25 Ridge, bears E. and W.

Descend over rocky land, through scattering timber.

75.00 Leave timber.

80.00 Set a sandstone, 15x10x8 ins., 10 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked with 1 notch on S. and W. edges, dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, mountainous and level.

Soil, rocky, 3rd. rate : sandy, 2nd. rate.

Timber, cedar and pinon.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth or mountainous

land on 80.00 etc.

## SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	
	S.89°53'E., on a random line, bet. secs. 25 and 36.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.10	Intersect E. bdy. of Tp., 10 lks. S. of the cor. of secs. 25-30-31 and 36, heretofore described.
	Thence I run
	N.89°57'W., on a true line,
	Bet. secs. 25 and 36.
	Ascend over rocky land over broken, steep north slope of mountain.
40.05	Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
61.00	Spur, projects NW.
	Descend.
70.75	Hollow, 100 ft. deep, course N.
	Ascend.
80.10	The cor. of secs. 25-26-35 and 36.
	Land, mountainous.
	Soil rocky, 3rd. rate.
	No timber.
	Mountainous land on 80.10 chs.
	N.0°01'W., bet. secs. 25 and 26.
	Descend over mountainous land.
6.00	Leave mountainous land, bears E. and W.
	Over level land, through dense undergrowth.
20.75	Wash, 20 lks. wide, 5 ft. deep, course NE.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 26 on W. face, 25 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
52.00	Begin abrupt ascent, bears E. and W.

SUBDIVISIONS OF T. 22 S., R. 20 E.

CHAINS

- 55.00 Ridge, bears E. and W.  
Descend.
- 70.75 Hollow, 75 ft. deep, course NE.  
Abrupt ascent.
- 73.00 Spur, projects NE.  
Descend.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked  
T 22 S S 24 on NE.,  
R 20 E S 25 on SE.,  
S 26 on SW., and  
S 23 on NW. face, with 2 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, Mountainous and level.  
Soil, clay, 3rd. rate ; loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on mountainous land on 80.00 chs.  
May 14 : At this cor. I set off 18°41'N., on decl. arc, and at 11h.56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°53'N.  
  
S. 89°57'E., on a random line, bet. secs. 24 and 25.
- 40.00 Set temp. ¼ sec. cor.
- 80.18 Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.  
Thence I run  
N. 89°56'W., on a true line,  
Bet. secs. 24 and 25.  
Ascend over rolling land, through dense undergrowth.
- 40.09 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 24 on N. face, 25 on S. face, dig pits, 18x18x12 ins., E. and W. of post,

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.18 The cor. of secs. 23-24-25 and 26.

Land rolling.

Soil, sandy, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.18 chs.

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N.  $0^{\circ}01'$  W., bet. secs. 23 and 24.

Descend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 23 on W. face, 24 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

56.00 Wash, 15 lks. wide, 5 ft. deep, course NE.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked T 22 S S 13 on NE., R 20 E S 24 on SE., S 23 on SW., and S 14 on NW. face, with 3 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.00 chs.

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SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

S.89°56'E., on a random line, bet.secs.13 and 24.

40.00 Set temp. 1/4 sec.cor.

80.24 Intersect E.bdy.of Tp., 3 lks.N.of the cor.of secs. 13-18-19 and 24, heretofore described.

Thence I run

N.89°55'W., on a true line,

Bet.secs.13 and 24.

Ascend over rolling land, through dense undergrowth.

39.00 Wash, 15 lks.wide, 8 ft.deep, course SE.

40.12 Set a pine post, 3 ft.long, 3 ins.sq., with marked stone, 24 ins.in the ground, for 1/4 sec.cor., marked 1/4 S 13 on N. face, 24 on S.face, dig pits, 18x18x12 ins., E.and W.of post, 3 ft.dist., and raise a mound of earth, 3 1/2 ft.base, 1 1/2 ft. high, N.of cor.

80.24 The cor.of secs.13-14-23 and 24.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.24 chs.

N.0°01'W., bet.secs.13 and 14.

Ascend over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft.long, 3 ins.sq., with marked stone, 24 ins.in the ground, for 1/4 sec.cor., marked 1/4 S 14 on W.face, 13 on E.face, dig pits, 18x18x12 ins., N.and S.of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft.base, 1 1/2 ft.high, W.of cor.

80.00 Set a redwood post, 3 ft.long, 4 ins.sq., with marked stone, 24 ins.in the ground, for cor.of secs.11-12-13 and 14, marked T 22 S S 12 on NE.,

R. 20 E S 13 on SE.,

S14 on SW., and

S 11 on NW.face, with 4 notches on S.and 1 notch on

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

E. edges, dig pits, 18x18x12 ins. in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

May 14, 1908.

May 15 : At 6h.56m., a.m., l.m.t., I set off 38°55'N., on lat. arc, 18°53'N., on decl. arc, and determine a meridian with the solar at the cor. of secs. 11-12-13 and 14.

Thence I run

S. 89°55'E., on a random line, bet. secs. 12 and 13.

40.00 Set temp. ¼ sec. cor.

80.18 Intersect E. bdy. of Tp., 10 lks. N. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

N. 89°51'W., on a true line,

Bet. secs. 12 and 13.

Gradual ascent, through dense undergrowth.

40.09 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

80.18 The cor. of secs. 11-12-13 and 14.

Land, sloping east.

Soil, loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.18 chs.

## SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

N.0°01'W., bet. secs. 11 and 12.

Gradual ascent over rolling land, through dense undergrowth.

40.00 Set a flint stone, 18x6x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

40.15 Wash, 25 lks. wide, 5 ft. deep, course SE.

80.00 Set a sandstone, 15x12x5 ins., 10 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Land rolling.

Soil, loam, 1st. rate.

No timber.

Land covered with dense undergrowth on 80.00 chs.

S.89°51'E., on a random line, bet. secs. 1 and 12.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.28 Intersect E. bdy. of Tp., 12 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run

N.89°56'W., on a true line,

Bet. secs. 1 and 12.

Ascend over rolling land, through dense undergrowth.

16.00 Ridge, bears NW. and SE.

Descend.

40.14 Set a flint stone, 18x14x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

61.00 Wash, 50 lks. wide, 10 ft. deep, course SE.

Ascend.

80.28 The cor. of secs. 1-2-11 and 12.

Land rolling.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

Soil, clay, 2nd. rate : loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.28 chs.

N.0°01'W., on a random line, bet. secs. 1 and 2.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

81.24 Intersect N. bdy. of Tp., 24 lks. W. of the cor. of secs.

1-2-35 and 36, which is a sandstone, 10x6x6 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

S.0°09'W., on a true line,

Bet. secs. 1 and 2.

Ascend over broken clay hills and mountainous land.

21.00 Clay spur, projects NE.

Descend.

22.35 Hollow, 75 ft. deep, course NE.

Abrupt ascent.

26.70 Ridge, bears E. and W.

Descend.

41.24 Set a sandstone, 15x10x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

42.30 Hollow, 50 ft. deep, course SW.

Abrupt ascent.

46.00 Spur, projects SW.

Descend.

49.00 Hollow, 50 ft. deep, course SW.

Ascend.

51.00 Spur, projects SW.

Descend.

64.00 Wash, 70 lks. wide, 15 ft. deep, course SE.

73.00 Wash, 35 lks. wide, 10 ft. deep, course SE.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

Begin ascent over broken clay land.

72.50 Ridge, bears E. and E.

Descend.

81.24 The cor. of secs. 1-2-11 and 12.

Land mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 81.24 chs.

May 15 : At this cor. I set off  $18^{\circ}55'N.$ , on decl. arc, and at 11h.56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}56'N.$

From the cor. of secs. 2-3-34 and 35, heretofore described on the S. bdy. of the Tp., I run

$N.0^{\circ}01'W.$ , bet. secs. 34 and 35.

Descend over solid sandstone, through scattering cedar and pinon timber.

6.00 Hollow, 100 ft. deep, course E.

Abrupt ascent.

11.00 Rocky spur, projects NE.

Abrupt descent.

30.00 Leave timber.

39.00 Foot of mountain, bears NW. and SE.

Descend over sandy land, through dense undergrowth.

40.00 Set a sandstone,  $16 \times 10 \times 5$  ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits,  $18 \times 18 \times 12$  ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

46.00 Sandstone knoll, 30 ft. high, on line.

73.00 Tash, 20 lbs. wide, 5 ft. deep, course SE.

Gradual ascent.

75.00 Begin abrupt ascent, bears NW. and SE.

77.50 Ridge, bears NW. and SE.

Abrupt descent.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

- 80.00 Falls on a sandstone boulder, 25x8x3 ft. above ground, I cut a cross (X), at exact point for cor. of secs. 26-27-34 and 35, mark 1 groove on S. and 2 grooves on E. sides of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
Land mountainous and rolling.  
Soil, rocky, 3rd. and 4th. rate. sandy, 3rd. rate.  
Timber, cedar and pinon.  
Undergrowth, greasewood.  
Land covered with dense undergrowth or mountainous land on 80.00 chs.
- S. 89°53'E., on a random line, bet. secs. 26 and 35.
- 40.00 Set temp. ¼ sec. cor.
- 80.24 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 25-26-35 and 36.  
Thence I run  
N. 89°55'W., on a true line,  
Bet. secs. 26 and 35.  
Ascend over rocky and mountainous land.
- 4.00 Spur, projects N.  
Abrupt descent.
- 20.50 Hollow, 100 ft. deep, course NE.  
Ascend along steep, rocky north slope.
- 40.12 Set a sandstone, 16x13x5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.  
Pits impracticable.
- 80.24 The cor. of secs. 26-27-34 and 35.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
No timber.  
Mountainous land on 80.24 chs.

May 15, 1908.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

May 16 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}52'N.$ , on lat. arc,  $19^{\circ}07'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 26-27-34 and 35.  
Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 26 and 27.

Descend over rocky and mountainous land.

12.00 Hollow, 150 ft. deep, course E.

Abrupt ascent.

17.50 Spur, projects E.

Gradual descent over rolling land, through dense undergrowth.

40.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 27 on W. face, 26 on E. face, dig pits,  $18 \times 18 \times 12$  ins., N. and S. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

59.00 Begin abrupt ascent, bears NW. and SE.

65.00 Ridge, bears NW. and SE.

Descend over rolling land.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked T 22 S S 23 on NE., R 20 E S 26 on SE., S 27 on SW., and S 22 on NW. face, with 2 notches on S. and E. edges, dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky and clay, 3rd. rate ; loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	S. 89°55' E., on a random line, bet. secs. 23 and 26.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.16	Intersect the cor. of secs. 23-24-25 and 26.
	Thence I run
	N. 89°55' W., on a true line,
	Bet. secs. 23 and 26.
	Ascend over rolling land, through dense undergrowth.
40.08	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 23 on N. face, 26 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
80.16	The cor. of secs. 22-23-26 and 27.
	Land rolling.
	Soil, clay, 2nd. rate.
	No timber.
	Undergrowth, greasewood and sage.
	Land covered with dense undergrowth on 80.16 chs.
	N. 0°01' W., bet. secs. 22 and 23.
	Gradual descent over rolling land, through dense undergrowth.
38.50	Wash, 20 lks. wide, 5 ft. deep, course NE.
40.00	Set a cedar post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 22 on W. face, 23 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
	Over level land.
80.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked T 22 S S 14 on NE., R 20 E S 23 on SE., S 22 on SW., and

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

S. 15 on NW. face, with 3 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling and level.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

S.  $89^{\circ}55'$  E., on a random line, bet. secs. 14 and 23.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.14 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 13-14-23 and 24.

Thence I run

N.  $89^{\circ}56'$  W., on a true line,

Bet. secs. 14 and 23.

Gradual ascent, through dense undergrowth.

40.07 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 14 on N. face, 23 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.14 The cor. of secs. 14-15-22 and 23.

Land rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.14 chs.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

N.0°01'W., bet.secs.14 and 15.

Ascend over rolling land, through dense undergrowth.

15.00 Ridge, bears E. and W.

Descend.

40.00 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 15 on W. face, 14 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, W. of cor.

Over level land.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked T 22 S S 11 on NE., R. 20 E S 14 on SE.,

S 15 on SW., and

S 10 on NW. face, with 4 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling and level.

Soil, loam, 1st. rate ; clay, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

S. 89°56' E., on a random line, bet. secs. 11 and 14.

40.00 Set temp. 1/4 sec. cor.

80.04 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 11-12-13 and 14.

Thence I run

N. 89° 55' W., on a true line,

Bet. secs. 11 and 14.

Ascend over rolling land, through dense undergrowth.

40.02 Set a redwood post, 3 ft. long, 3 ins. sq., with marked stone,

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 11 on N. face, 14 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

80.04 The cor. of secs. 10-11-14 and 15.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.04 chs.

May 16: At this cor. I set off 19 $^{\circ}$ 09' N., on decl. arc, and at 11h.56m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38 $^{\circ}$ 55' N.

N.0 $^{\circ}$ 01' W., bet. secs. 10 and 11.

Gradual ascent, through dense undergrowth.

40.00

Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 10 on W. face, 11 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00

Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked T 22 S S 2 on NE., R 20 E S 11 on SE., S 10 on SW., and S 3 on NW. face, with 5 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

S.  $89^{\circ}55'E.$ , on a random line, bet. secs. 2 and 11.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 1-2-11 and 12.

Thence I run

N.  $89^{\circ}54'W.$ , on a true line, bet. secs. 2 and 11.

Ascend over rolling land, through dense undergrowth.

11.00 Wash, 10 lks. wide, 10 ft. deep, course SE.

29.00 Ridge, bears N. and S.

Descend.

40.01 Set a sandstone, 18x9x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

80.02 The cor. of secs. 2-3-10 and 11.

Land, rolling.

Soil, clay, 2nd. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 80.02 chs.

N.  $0^{\circ}01'W.$ , on a random line, bet. secs. 2 and 3.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

81.27 Intersect N. bdy. of Tp., 9 lks. W. of the cor. of secs. 2-3-34 and 35, which is a limestone, 10x6x5 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

S.  $0^{\circ}03'W.$ , on a true line,

Bet. secs. 2 and 3.

Descend over rolling land, through dense undergrowth.

41.27 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

81.27 Pits impracticable.  
The cor. of secs. 2-3-10 and 11.  
Land rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, sage and greasewood.

Land covered with dense undergrowth on 81.27 chs.

May 16, 1908.

May 17 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc.,  $19^{\circ}21'N.$ , on decl. arc, and determine a meridian, with the solar, at the cor. of secs. 3-4-33 and 34, heretofore described on the S. bdy. of the Tp.,

Thence I run

$N.0^{\circ}02'W.$ , bet. secs. 33 and 34.

Descend abruptly over solid sandstone, through scattering cedar and pinon timber.

40.00 Set a sandstone, 20x7x6 ins., in mound of stone, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A cedar, 7 ins. diam., bears  $S.7^{\circ}E.$ , 40 lks. dist., marked  $\frac{1}{4}$  S 34 BT.

A cedar, 15 ins. diam., bears  $S.30^{\circ}W.$ , 45 lks. dist., marked  $\frac{1}{4}$  S 33 BT.

On account of natural obstacles, it is impossible to set this cor. in the ground.

64.00 Foot of mountain and sandstone ledges, bearing NW. and SE.  
Over level sandy land, through dense undergrowth.

80.00 Set a sandstone, 12x10x8 ins., 8 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked with 1 notch on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and level.

Soil, rocky, 4th. rate : sandy, 3rd. rate.

SUBDIVISIONS OF T. 22 S., R. 20 E.

CHAINS

Timber, cedar and pinon.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

S. 89° 53' E., on a random line, bet. secs. 27 and 34.

40.00 Set temp. 1/4 sec. cor.

80.16 Intersect the cor. of secs. 26-27-34 and 35.

Thence I run

N. 89° 53' W., on a true line,

Bet. secs. 27 and 34.

Ascend over rocky and mountainous land.

2.50 Ridge, bears NW. and SE.

Abrupt descent.

6.50 Foot of abrupt descent, bears NW. and SE.

Gradual descent over rolling sandy land, through dense undergrowth.

40.08 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

80.16 The cor. of secs. 27-28-33 and 34.

Land mountainous and rolling.

Soil, rocky and sandy, 3rd. rate.

No timber.

Land covered with dense undergrowth or mountainous land on 80.16 chs.

N. 0° 02' W., bet. secs. 27 and 28.

Over level land, through dense undergrowth.

16.00 Begin abrupt ascent, bears NW. and SE.

18.54 Ridge, bears E. and W.

Abrupt descent.

30.00 Foot of abrupt descent, bears NW. and SE.

SUBDIVISIONS OF T. 22 S., R. 20 E.

CHAINS Descend over rolling land.

40.00 Set a lava stone, 20x12x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.

54.00 Hollow, 100 ft. deep, course NW.  
Ascend.

76.00 Begin abrupt ascent, bears NW. and SE.

77.50 Ridge, bears NW. and SE.  
Descend.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked T 22 S S 22 on NE.,  
R 20 E S 27 on SE.,  
S 28 on SW., and  
S 21 on NW. face, with 2 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land rolling and mountainous.  
Soil, rocky, 3rd. rate : sandy, 2nd. and 3rd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 80.00 chs.

S. 89°53'E., on a random line, bet. secs. 22 and 27.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.10 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 22-23-26 and 27.  
Thence I run  
N. 89°55'W., on a true line,  
Bet. secs. 22 and 27.  
Ascend along north slope, through dense undergrowth.

40.05 Set a cedar post, 3 ft. long, 3 ins. sq., with marked stone,



SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

with 3 notches on S. and E. edges, dig pits, 18x18x12 ins., in each sec.; 5 1/2 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous, rolling and level.

Soil, clay, 2nd. and 3rd. rate; loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 40.00 chs.

S. 89°55'E., on a random line, bet. secs. 15 and 22.

40.00 Set temp. 1/4 sec. cor.

80.02 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 14-15-22 and 23.

Thence I run

N. 89°54'W., on a random line, bet. secs. 15 and 22.

Descend over rolling land, through dense undergrowth.

28.25 Leave dense undergrowth.

40.01 Set a cedar post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for 1/4 sec. cor., marked 1/4 S 15 on N. face, 22 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 1/2 ft. base, 1 1/2 ft. high, N. of cor.

60.00 Over level land.

80.02 The cor. of secs. 15-16-21 and 22.

28.25 Land rolling and level.

51.77 Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 28.25 chs.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	
	N.0°02'W., bet.secs.15 and 16. Gradual ascent over rolling land.
31.50	Ridge, bears E. and W. Descend.
40.00	Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 16 on W. face, 15 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
65.00	Over level land.
80.00	Set a redwood post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked T 22 S S 10 on NE., R 20 E S 15 on SE., S 16 on SW., and S 9 on NW. face, with 4 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land rolling and level. Soil, clay, 2nd. rate : loam, 1st. rate. No timber.
	S.89°54'E., on a random line, bet.secs.10 and 15.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.98	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 10-11-14 and 15. Thence I run N.89°55'W., on a true line, Bet.secs.10 and 15. Gradual descent over rolling land, through dense undergrowth.
21.00	Leave dense undergrowth.
39.99	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 10 on N.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

face, 15 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.

79.98 The cor. of secs. 9-10-15 and 16.

21  
54-98  
Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 21.00 chs.

N. 0°02'W., bet. secs. 9 and 10.

Gradual ascent.

30.50 Wash, 20 lks. wide, 8 ft. deep, course SW.

37.30 Round sand knoll, 10 ft. high, on line.

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked

T 22 S S 3 on NE.,

R 20 E S 10 on SE.,

S 9 on SW., and

S 4 on NW. face, with 5 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist.,

and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, sloping south.

Soil, loam, 1st. rate.

No timber.

S. 89°55'E., on a random line, bet. secs. 3 and 10.

40.00 Set temp. ¼ sec. cor.

79.92 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 2-3-10 and 11.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

Thence I run

N.89°57'W., on a true line,

Bet.secs.3 and 10.

Descend gradually over rolling land, through dense undergrowth.

11.00 Leave dense undergrowth.

39.96 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 3 on N. face, 10 on S. face, dig pits, 18x18x12 ins., N. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

76.50 Wash, 50 lks. wide, 12 ft. deep, course S.

79.92 The cor. of secs. 3-4-9 and 10.

11  
68.92

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 11.00 chs.

N.0°02'W., on a random line, bet. secs. 3 and 4.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

81.19 Intersect N. bdy. of Tp., 7 lks. W. of the cor. of secs. 3-4-33 and 34, which is a cedar post, 3 ins. sq., 12 ins. above the ground, marked and witnessed as described by the surveyor general.

Thence I run

S.0°01'W., on a true line,

Bet. secs. 3 and 4.

Gradual descent.

41.19 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 4 on E. face, 3 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 5 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

high, W. of cor.

81.19 The cor. of secs. 3-4-9 and 10.

Land, sloping south.

Soil, loam, 1st. rate.

No timber.

May 17, 1908.

May 18 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}51'N.$ , on lat. arc,  $19^{\circ}34'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 4-5-32 and 33.

Thence I run

$N.0^{\circ}05'W.$ , bet. secs. 32 and 33.

Descend abruptly over rocky and mountainous land, through scattering cedar and pinon timber.

16.00 Hollow, 100 ft. deep, course NW.

Ascend.

20.00 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.

29.10 Top of ledges, 400 ft. high, and rocky ridge, bearing NW. and SE.

Abrupt descent.

40.00 Set a sandstone,  $15 \times 12 \times 3$  ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A cedar, 10 ins. diam., bears  $S.74^{\circ}E.$ , 16 lks. dist., marked  $\frac{1}{4} S 38 BT.$

A cedar, 6 ins. diam., bears  $N.48^{\circ}W.$ , 23 lks. dist., marked  $\frac{1}{4} S 32 BT.$

71.00 Hollow, 150 ft. deep, course E.

Leave timber.

Abrupt ascent.

79.25 Rocky spur, projects E.

Abrupt descent.

80.00 Falls on a sandstone boulder,  $10 \times 6 \times 2$  ft. above ground, I

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

out a cross, (X), at exact point for cor. of secs. 28-29-32 and 33, mark 1 groove on S. and 4 grooves on E. sides of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

S. 89° 53' E., on a random line, bet. secs. 28 and 33.

40.00 Set temp. ¼ sec. cor.

80.02 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 27-28-33 and 34.

Thence I run

N. 89° 55' W., on a true line,

Bet. secs. 28 and 33.

Gradual ascent through dense undergrowth.

33.00 Begin abrupt ascent over rocky land, bearing NW. and SE. Enter scattering cedar and pinon timber.

40.01 Set a sandstone, 16x10x5 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, from which

A cedar, 8 ins. diam., bears N. 50° E., 26 lks. dist., marked ¼ S 28 BT.

No other trees within limits, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

70.00 Spur, projects N.

Abrupt descent.

73.50 Hollow, 75 ft. deep, course NE.

Abrupt ascent.

Leave timber.

80.02 The cor. of secs. 28-29-32 and 33.

Land rolling and mountainous.

Soil, sandy, 3rd. rate ; rocky, 3rd. and 4th. rate.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

Timber, cedar and pinon.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 20.02 chs.

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N.0°03'W., bet. secs. 28 and 29.

Descend over rocky and mountainous land.

39.50 Hollow, 200 ft. deep, course NW.

Abrupt ascent.

40.00 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

46.25 Rocky ridge, bears NW. and SE.

Abrupt descent.

73.00 Foot of abrupt descent, bears NW. and SE.

Descend through dense undergrowth.

80.00 Set a sandstone, 22x14x3 ins., 16 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked with 2 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous and rolling.

Soil, rocky and sandy, 3rd. and 4th. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

May 18 : At this cor. I set off 19°36'N., on decl. arc, and at 11h.56m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°53'N.

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## SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	
	S. $89^{\circ}55'$ E., on a random line, bet. secs. 21 and 28.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.10	Intersect N. and S. line, 17 lks. S. of the cor. of secs. 21-22-27 and 28.
	Thence I run
	S. $89^{\circ}52'$ W., on a true line,
	Bet. secs. 21 and 28.
	Ascend over mountainous land.
5.50	Ridge, bears NW. and SE.
	Abrupt descent.
10.00	Foot of abrupt descent, bears NW. and SE.
	Gradual descent, through dense undergrowth.
40.05	Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
80.10	The cor. of secs. 20-21-28 and 29.
	Land, mountainous and rolling.
	Soil, clay, 3rd. rate ; sandy, 2nd. rate.
	No timber.
	Undergrowth, greasewood and sage.
	Land covered with dense undergrowth or mountainous land on 80.10 chs.
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	N. $0^{\circ}03'$ W., bet. secs. 20 and 21.
	Over level land, through dense undergrowth.
20.00	Begin abrupt ascent, bears NW. and SE.
25.00	Ridge, bears NW. and SE. Leave undergrowth.
	Descend over rolling land.
40.00	Set a pine post., 3 ft. long, 3 ins., sq., with marked stone, 24 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ S 20 on W. face, 21 on E. face, dig pits, 18x18x12 ins., N. and S. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.

## SUBDIVISIONS OF T. 22 S., R. 20 E.

## CHAINS

- 61.50 Wash, 15 lks. wide, 6 ft. deep, course SW.
- 80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked  
 25  
 55  
 T 22 S S 16 on NE.,  
 R 20 E S 21 on SE.,  
 S 20 on SW., and  
 S 17 on NW. face, with 3 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor. Land, rolling and mountainous.  
 Soil, sandy and clay, 2nd. and 3rd. rate : loam, 1st. rate.  
 No timber.  
 Undergrowth, greasewood and sage.  
 Land covered with dense undergrowth or mountainous land on 25.00 chs.
- 
- N. 89° 58' E., on a random line, bet. secs. 16 and 21.
- 40.00 Set temp. ¼ sec. cor.
- 79.96 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 15-16-21 and 22.  
 Thence I run  
 S. 89° 57' W., on a true line,  
 Bet. secs. 16 and 21.
- Gradual descent.
- 39.98 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 16 on N. face, 21 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
- 44.00 Wash, 15 lks. wide, 5 ft. deep, course SW.
- 79.96 The cor. of secs. 16-17-20 and 21.  
 Land, rolling.  
 Soil, loam, 1st. rate.  
 No timber.
-

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

N.0°03'W., bet.secs.16 and 17.

Gradual ascent.

40.00 Set a flint stone, 18x7x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec.cor., marked  $\frac{1}{2}$  on W.face, dig pits, 18x18x12 ins., N.and S.of stone, 3 ft.dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft.high, W.of cor.

80.00 Set a sandstone, 15x6x6 ins., 10 ins. in the ground, for cor. of secs.8-9-16 and 17, marked with 4 notches on S.and E. edges, and raise a mound of stone, 2 ft.base, 1 $\frac{1}{2}$  ft.high, W. of cor.

Rits impracticable.

Land rolling.

Soil, loam, 1st.rate.

No timber.

N.89°57'E., on a random line, bet.secs.9 and 16.

40.00 Set temp. $\frac{1}{4}$  sec.cor.

80.02 Intersect N.and S.line, 7 lks.N.of the cor.of secs. 9-10-15 and 16.

Thence I run

West, on a true line,

Bet.secs.9 and 16.

Over level land.

13.00 Wash, 20 lks.wide, 10 ft.deep, course SW.

Gradual ascent.

40.01 Set a pine post, 3 ft.long, 3 ins.sq., with marked stone, 24 ins.in the ground, for  $\frac{1}{4}$  sec.cor., marked  $\frac{1}{4}$  S 9 on N. face, 16 on S.face, dig pits, 18x18x12 ins., E.and W.of post, 3 ft.dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft.base, 1 $\frac{1}{2}$  ft. high, N.of cor.

80.02 The cor.of secs.8-9-16 and 17.

Land, level and rolling.

Soil, loam, 1st.rate.

No timber.

May 18, 1908.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

May 19 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}55'N.$ , on lat. arc,  $19^{\circ}47'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 8-9-16 and 17.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 8 and 9.

Ascend.

4.00 Begin abrupt ascent, bears NE. and SW.

7.90 Spur, projects E.

Abrupt descent.

10.50 Hollow, 75 ft. deep, course E.

Abrupt ascent.

22.00 Spur, projects E.

Abrupt descent.

25.25 Hollow, 75 ft. deep, course E.

Abrupt ascent.

28.50 Ridge, bears NE. and SW.

Abrupt descent.

33.60 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

35.50 Spur, projects SW.

Abrupt descent.

38.50 Hollow, 75 ft. deep, course SW.

Ascend.

40.00 Spur, projects SW.

Set a sandstone, 15x9x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Descend.

42.00 Hollow, 50 ft. deep, course SW.

Ascend.

60.00 Ridge, bears NE. and SW.

Descend.

62.00 Hollow, 50 ft. deep, course SW.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	
	Ascend.
64.30	Spur, projects SW.
	Descend.
67.75	Hollow, 50 ft. deep, course W.
	Ascend.
70.20	Spur, projects W.
	Descend.
76.50	Hollow, 75 ft. deep, course SW.
	Ascend.
80.00	Set a sandstone, 18x8x7 ins., 12 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.
76.50 3.50	Pits impracticable.
	Land, rolling and mountainous.
	Soil, clay, sandy and rocky, 3rd. rate.
	No timber.
	Mountainous land on 76.50 chs.
	East, on a random line, bet. secs. 4 and 9.
40.00	Set temp. ¼ sec. cor.
80.00	Intersect N. and S. line, 7 lks. N. of the cor. of secs. 3-4-9 and 10.
	Thence I run
	N. 89° 57' W., on a true line,
	Bet. secs. 4 and 9.
	Over level land.
16.25	Wash, 50 lks. wide, 10 ft. deep, course S.
40.00	Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for ¼ sec. cor., marked ¼ S 4 on N. face, 9 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
	Begin ascent.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

- 56.50 Begin abrupt ascent, bears N. and S.
- 60.00 Spur, projects S.  
Abrupt descent.
- 65.00 Hollow, 125 ft. deep, course S.  
Abrupt ascent.
- 74.25 Ridge, bears NE. and SW.  
Descend.
- 79.25 Hollow, 60 ft. deep, course SW.  
Ascend.
- 80.00 The cor. of secs. 4-5-8 and 9,  
Land, level, rolling and mountainous.  
Soil, loam, 1st. rate ; clay and sandy, 3rd. rate.  
No timber.  
Mountainous land on 23.50 chs.  

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N.  $0^{\circ}03'W.$ , on a random line, bet. secs. 4 and 5.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 81.39 Intersect N. bdy. of Tp., 17 lks. W. of the cor. of secs.  
4-5-32 and 33, which is a sandstone, 12x5x5 ins. above the  
ground, marked and witnessed as described by the surveyor  
general.  
Thence I run  
 $S. 0^{\circ}04'W.$ , on a true line,  
Bet. secs. 4 and 5.  
Over level mesa, through dense undergrowth.
- 1.00 Begin abrupt descent, bears NE. and SW.
- 3.50 Hollow, 100 ft. deep, course SE.  
Abrupt ascent.
- 8.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 26.00 Hollow, 75 ft. deep, course SW.  
Ascend.
- 41.39 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

sec.cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

44.50 Ridge, bears NE. and SW.

Abrupt descent.

49.00 Hollow, 75 ft. deep, course SW.

Ascend.

77.50 Ridge, bears NE. and SW.

Descend.

81.39 The cor. of secs. 4-5-8 and 9.

Land level and mountainous.

Soil, rocky and sandy, 3rd. rate.

No timber.

Undergrowth, sage.

Land covered with dense undergrowth or mountainous land  
on 81.39 chs.

May 19 : At this cor. I set off  $19^{\circ}49'N.$ , on decl. arc, and  
at 11h.56m., a.m., l.m.t., observe the sun on the meridian,  
the resulting lat. is  $38^{\circ}56'N.$

From the cor. of secs. 5-6-31 and 32, heretofore described  
on the S. bdy. of the Tp., I run

$N.0^{\circ}03'W.$ , bet. secs. 31 and 32.

Ascend thr ough dense undergrowth.

5.25 Road, bears NW. and SE.

10.00 Spur, projects NW.

Abrupt descent.

16.00 Hollow, 75 ft. deep, course NW.

Abrupt ascent.

26.00 Ridge, bears NW. and SE.

Abrupt descent.

39.00 Hollow, 100 ft. deep, course NW.

Abrupt ascent.

40.00 Set a sandstone,  $18 \times 14 \times 3$  ins., 12 ins. in the ground, for  $\frac{1}{4}$

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

43.00

Ridge, bears NW. and SW.

Descend.

47.00

Hollow, 100 ft. deep, course NW.

Ascend.

64.00

Begin abrupt ascent over sandstone ledges, bearing NW. and SE.

76.00

Top of ledges, 400 ft. high, bear NW. and SE.

Ascend over rocky land.

80.00

Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for cor. of secs. 29-30-31 and 32, marked with 1 notch on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land rolling and mountainous.

Soil, sandy, 3rd. rate; rocky, 3rd. and 4th. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

40.00

S.  $89^{\circ}53'E.$ , on a random line, bet. secs. 29 and 32.

Set temp.  $\frac{1}{4}$  sec. cor.

80.14

Intersect N. and S. line, 3 lks. S. of the cor. of secs. 28-29-32 and 33.

Thence I run

N.  $89^{\circ}54'W.$ , on a true line,

Bet. secs. 29 and 32.

Ascend along steep north slope, over solid sandstone through scattering cedar and pinon timber.

23.00

Ridge, bears NW. and SE.

Abrupt descent.



## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

Ascend over rocky land.

80.27 The cor. of secs. 29-30-31 and 32.

Land rolling and mountainous.

Soil, sandy, 3rd. rate ; rocky, 4th. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 80.27 chs.

May 19, 1908.

May 20 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}52'N.$ , on lat. arc,  $20^{\circ}00'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 29-30-31 and 32.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 29 and 30.

Abrupt ascent over sandstone boulders.

19.00 Sandstone ridge, bears NW. and SE.

Abrupt descent along steep, east slope.

40.00 Set a sandstone,  $15 \times 10 \times 6$  ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

54.00 Hollow, 300 ft. below ridge, course NE.

Abrupt ascent.

62.90 Ridge, bears NE. and SW.

Abrupt descent.

75.40 Hollow, 125 ft. deep, course NE.

Abrupt ascent.

79.50 Spur, projects NE.

Abrupt descent.

80.00 Set a granite stone,  $15 \times 10 \times 6$  ins., 10 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked with 2 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft.

## SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	
	base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
	Land mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	No timber.
	Mountainous land on 80.00 chs.
	S. $89^{\circ}54'$ E., on a random line, bet. secs. 20 and 29.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line, 19 lks. S. of the cor. of secs. 20-21-28 and 29.
	Thence I run
	S. $89^{\circ}58'$ W., on a true line,
	Bet. secs. 20 and 29.
	Ascend through dense undergrowth.
10.00	Begin abrupt ascent, bears NW. and SE.
15.00	Spur, projects NW.
	Descend.
25.50	Hollow, 75 ft. deep, course NW.
	Ascend over sandstone ledges.
40.02	Set a sandstone, 16x10x7 ins., in a mound of stone, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
	It is impossible to set this cor. in the ground, on account of natural obstacles.
42.25	Spur, projects N.
	Abrupt descent.
50.00	Hollow, 125 ft. deep, course NE.
	Abrupt ascent.
58.00	Spur, projects NE.
	Abrupt descent.
70.00	Hollow, 100 ft. deep, course NW.
	Abrupt ascent.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

- 72.25 Spur, projects NW.  
Descend.
- 76.90 Hollow, 75 ft. deep, course NE.  
Ascend.
- 80.04 The cor. of secs. 19-20-29 and 30.  
Land mountainous, and rolling.  
Soil, sandy, 3rd. rate ; rocky, 3rd. and 4th. rate.  
No timber.  
Undergrowth, greasewood.  
Land covered with dense undergrowth or mountainous land  
on 80.04 chs.
- 
- 40.00 N. 89°50'W., on a random line, bet. secs. 19 and 30.  
Set temp.  $\frac{1}{4}$  sec. cor.
- 80.19 Intersect W. bdy. of Tp., 19 lks. N. of the cor. of secs.  
19-24-25 and 30, heretofore described.  
Thence I run  
S. 89°58'E., on a true line,  
Bet. secs. 19 and 30.  
Ascend through dense undergrowth.
- 6.00 Begin abrupt ascent over rocky land, bearing NW. and SE.
- 38.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 40.19 Set a lime stone, 16x6x6 ins., 11 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 46.50 Hollow, 125 ft. deep, course NW.  
Abrupt ascent.
- 49.00 Spur, projects NW.  
Descend over sandstone boulders.
- 75.50 Hollow, 75 ft. deep, course NE.  
Ascend.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

80.19 The cor. of secs. 19-20-29 and 30. . . . .  
 Land rolling and mountainous.  
 Soil, sandy, 3rd. rate : rocky, 3rd. and 4th. rate.  
 No timber.  
 Undergrowth, sage and greasewood.  
 Land covered with dense undergrowth or mountainous  
 land on 80.19 chs.  
 May 20 : At this cor. I set off 20°01' N., on decl. arc, and  
 at 11h.56m., a.m., l.m.t., observe the sun on the meridian,  
 the resulting lat. is 38°53' N.

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N. 0° 03' W., Bet. secs. 19 and 20.  
 Descend over mountainous land.

15.00 Leave mountainous land, bears E. and W.  
 Descend gradually over rolling land.

37.00 Wash, 10 lks. wide, 6 ft. deep, course SW.  
 Over level land.

40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$   
 sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and  
 S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft.  
 base, 1 $\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a pine post, 3 ft. long, 4 ins. sq., with marked stone, 24  
 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked  
 T 22 S S 17 on NE.,  
 R 20 E S 20 on SE.,  
 S 19 on SW., and  
 S 18 on NW. face, with 3 notches on S. and 5 notches on E.  
 edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist.,  
 and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
 Land, mountainous and rolling.  
 Soil, rocky, 3rd. rate; loam, 1st. rate.  
 No timber.  
 Mountainous land on 15.00 chs.

15  
65

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

- N.  $89^{\circ}58'E.$ , on a random line, bet. secs. 17 and 20.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.96 Intersect N. and S. line, 9 lks. N. of the cor. of secs. 16-17-20 and 21.
- Thence I run
- $N.89^{\circ}58'W.$ , on a true line,  
Bet. secs. 17 and 20.
- Gradual ascent over rolling land.
- 39.98 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 17 on N. face, 20 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 79.96 The cor. of secs. 17-18-19 and 20.
- Land rolling.
- Soil, loam, 1st. rate.
- No timber.
- 
- N.  $89^{\circ}58'W.$ , on a random line, bet. secs. 18 and 19.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.12 Intersect W. bdy. of Tp., 16 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.
- Thence I run
- $S.89^{\circ}51'E.$ , on a true line,  
Bet. secs. 18 and 19.
- Descend over mountainous land.
- 0.50 Hollow, 100 ft. deep, course SW.
- Abrupt ascent.
- 9.50 Ridge, bears NE. and SW.
- Abrupt descent.
- 12.00 Hollow, 60 ft. deep, course S.
- Ascend.
- 13.10 Spur, projects S.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

- Descend over rolling land.
- 36.75 Road, bears NE. and SW.
- 40.12 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24 ins in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 18 on N. face, 19 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 40.30 Hollow, 50 ft. deep, course SW.  
Ascend.
- 48.00 Ridge, bears NE. and SW.  
Descend.
- 80.12 The cor. of secs. 17-18-19 and 20.  
Land, mountainous and rolling.  
Soil, clay, 2nd. and 3rd. rate : loam, 1st. rate.  
No timber.  
Mountainous land on 13.10 chs.
- 
- N. 0° 03' W., bet. secs. 17 and 18.  
Ascend over rolling land.
- 40.00 Set a sandstone, 12x8x8 ins., 8 ins. in the ground, for  $\frac{1}{4}$  sec. cor. marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 80.00 Set a sandstone, 15x8x5 ins., 10 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked with 4 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, rolling.  
Soil, loam, 1st. rate : clay, 2nd. and 3rd. rate.  
No timber.

May 20, 1908.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

May 21 : At 6h.56m., a.m., l.m.t., I set off  $38^{\circ}55'N.$ , on lat. arc,  $20^{\circ}12'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 7-8-17 and 18.

Thence I run

$S.89^{\circ}58'E.$ , on a random line, bet. secs. 8 and 17.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 19 lks. N. of the cor. of secs. 8-9-16 and 17.

Thence I run

$N.89^{\circ}50'W.$ , on a true line,

Bet. secs. 8 and 17.

Ascend.

3.00 Abrupt ascent, bears NE. and SW.

7.50 Spur, projects S.

Abrupt descent.

12.00 Hollow, 50 ft. deep, course SE.

Abrupt ascent.

19.00 Top of ascent, over level land.

52.00 Begin descent, bears NE. and SW.

39.99 Set a sandstone,  $18 \times 8 \times 4$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

49.50 Hollow, 75 ft. deep, course SW.

Ascend over rolling clay.

79.98 The cor. of secs. 7-8-17 and 18.

33-53  
43-07 Land mountainous, level and rolling.

Soil, clay, 2nd. and 3rd. rate.

No timber.

Mountainous land on 36.50 chs.

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

N. 89° 51' W., on a random line, bet. secs. 7 and 18.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.10 Intersect W. bdy. of Tp., 16 lks. N. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

S. 89° 58' E., on a true line,

Bet. secs. 7 and 18.

Ascend over rolling land.

27.50 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

40.10 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3  $\frac{1}{2}$  ft. base, 1  $\frac{1}{2}$  ft. high, N. of cor.

47.00 Begin abrupt ascent, bears NE. and SW.

56.00 Spur, projects N.

Abrupt descent.

57.50 Hollow, 75 ft. deep, course NW.

Abrupt ascent.

60.00 Top of abrupt ascent, bears NE. and SW.

Gradual ascent.

71.20 Road, bears NE. and SW., on top of ridge, bearing NE. and SW.

Abrupt descent.

79.00 Foot of abrupt descent, bears NE. and SW.

Descend.

80.10 The cor. of secs. 7-8-17 and 18.

20.80 Land rolling and mountainous.

59.30 Soil, clay, 2nd. and 3rd. rate.

No timber.

Mountainous land on 20.80 chs.

SUBDIVISIONS OF T. 22 S., R. 20 E.

CHAINS

N. 0° 03' W., bet. secs. 7 and 8.

Ascend.

0.50 Begin abrupt ascent, bears NE. and SW.

8.00 Road, bears NE. and SW., on top of ridge, bears NE. and SW.

Descend.

10.00 Hollow, 30 ft. deep, course SW.

Ascend.

13.00 Spur, projects SW.

Abrupt descent.

22.00 Foot of abrupt descent, bears NE. and SW.

Descend over rolling land.

40.00 Set a flint stone, 18x15x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1  $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

44.50 Wash, 20 lks. wide, 10 ft. deep, course SW.

Over level land.

49.00 Wash, 50 lks. wide, 10 ft. deep, course SW.

Gradual ascent.

54.00 Begin abrupt ascent, bears NE. and SW.

62.10 Ridge, bears NE. and SW.

Abrupt descent.

76.00 Foot of abrupt descent, bears NE. and SW.

Gradual descent.

80.00 Set a sandstone, 18x9x4 ins., 12 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked with 5 notches on S. and E. edges, dig pits, 18x18x12 ins., in each sec., 5  $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

43.50  
36.50

Land rolling and mountainous.

Soil, clay, 2nd. and 3rd. rate.

No timber.

Mountainous land on 43.50 chs.

May 21 : At this cor. I set off 20° 14' N., on decl. arc, and

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

at 11h.56m., a.m., l.m.t., observe the sun on the meridian,  
the resulting lat. is  $38^{\circ}56'N$ .

S.  $89^{\circ}50'E$ ., on a random line, bet. secs. 5 and 8.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect N. and S. line, 10 l's. S. of the cor. of secs.  
4-5-8 and 9.

Thence I run

N.  $89^{\circ}54'W$ ., on a true line,

Bet. secs. 5 and 8.

Ascend.

1.10 Spur, projects SW.

Descend.

10.05 Hollow, 75 ft. deep, course SW.

Ascend.

21.50 Spur, projects SW.

Descend.

24.75 Hollow, 50 ft. deep, course S.

Ascend.

31.00 Spur, projects S.

Descend.

32.50 Hollow, 50 ft. deep, course S.

Ascend.

37.00 Top of ascent bears NE. and SW.

Over level land.

40.02 Set a sandstone, 15x10x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and  
W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft.  
base,  $1\frac{1}{2}$  ft. high, N. of cor.

43.50 Road, bears N. and S.

58.75 Leave level land, bears N. and S.

Abrupt descent.

## SUBDIVISIONS OF T.22 S., R.20 E.

## CHAINS

- 62.50 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 67.40 Ridge, bears NE. and SW.  
Abrupt descent.
- 78.00 Foot of abrupt descent, bears NE. and SW.  
Gradual descent.
- 80.04 The cor. of secs. 5-6-7 and 8.  
58.29 Land, rolling and mountainous.  
2 1.75 Soil, loam, 1st. rate; clay, 2nd. and 3rd. rate.  
No timber.  
Mountainous land on 58.29 chs.
- 
- N. 89°58'W., on a random line, bet. secs. 6 and 7.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.04 Intersect W. bdy. of Tp., 3 lks. S. of the cor. of secs.  
1-6-7 and 12, heretofore described.  
Thence I run  
S. 89°57'E., on a true line,  
Bet. secs. 6 and 7.  
Gradual descent over rolling land.
- 40.04 Set a pine post, 3 ft. long, 3 ins. sq., with marked stone, 24  
ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 6 on N. face,  
7 on S. face, dig pits, 18x18x12 ins., E. and W. of post, 3 ft.  
dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high,  
N. of cor.
- 45.50 Road, bears NE. and SW.
- 68.00 Wash, 1.00 ch. wide, 20 ft. deep, course SW.  
Over level land.
- 80.04 The cor. of secs. 5-6-7 and 8.  
Land, rolling and level.  
Soil, clay, 2nd. rate.  
No timber.
-

## SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS	
	N.0°03'W'. on a random line, bet. secs. 5 and 6.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
81.34	Intersect N. bdy. of Tp., 5 lks. W. of the cor. of secs. 5-6-31 and 32, which is a flint stone, 8x6x4 ins. above ground, marked and witnessed as described by the surveyor general.
	Thence I run
	S.0°01'E., on a true line,
	Bet. secs. 5 and 6.
	Gradual descent over rolling land.
41.34	Set a sandstone, 15x9x5 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
41.45	Road, bears NE. and SW.
55.50	Wash, 50 lks. wide, 10 ft. deep, course SW.
77.00	Wash, 10 lks. wide, 10 ft. deep, course SW.
81.34	The cor. of secs. 5-6-7 and 8.
	Land rolling.
	Soil, clay, 2nd. and 3rd. rate.
	No timber.

May 21, 1908

## GENERAL DESCRIPTION

This township is mountainous in the southern portion rolling or level on the balance, with the exception of isolated clay hills or knolls, throughout the township.

The soil of the mountainous portion is generally rocky while the balance of the township is loam or clay, on the loam, crops can be raised with irrigation.

A scattering growth of cedar and pinon timber is found in the southern portion of the township while on the balance of the township a growth of undergrowth is found, which

SUBDIVISIONS OF T.22 S., R.20 E.

CHAINS

grows dense in the eastern portion of the township.

This township forms the water shed between Green and Grand rivers, the water courses on the eastern portions drain into Grand River and on the western portion into Green River.

There is no surface water or settlers in this township! There are no indications of mineral found in this township.

*Jarvis H. Flint*  
U.S. Deputy Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by.....

....., United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of.....

showing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "1", *Chainman.*

Tp. 23 S., R. 20 E. ...., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Asman.*

....., *Asman.*

....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted.....

....., United States Deputy Surveyor, in surveying all

those parts or portions of the.....

..... of the.....

..... meridian,..... of....., which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for.....

....., *Chainman.*

....., *Chainman.*

....., *Moundman.*

....., *Moundman.*

....., *Asman.*

....., *Asman.*

....., *Flagman.*

Subscribed and sworn to before me this..... }  
day of....., 190..... }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, \_\_\_\_\_, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from \_\_\_\_\_ United States Surveyor General for \_\_\_\_\_, bearing date of the \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final affidavit see book "L" T. 23 S., R. 20 E.

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor.

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 190 \_\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, \_\_\_\_\_, 1909.

The foregoing field notes of the survey of \_\_\_\_\_ the subdivisional lines of Township No. 22 South, Range No. 20 East of the Salt Lake Base and Meridian, Utah,

executed by \_\_\_\_\_ Harvey D. Heist and Job H. Winwood under ~~his~~ their contract No. 298, dated \_\_\_\_\_ March 21, \_\_\_\_\_, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*Thomas Hill*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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313

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4-079.

BOOK A-349

" L "

FILED  
SEP 20 1908

*MHB*

X. J. B.

# FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS

of

Township No. 23 South,

Range No. 20 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heint and Job H. Winwood, United States Deputy Surveyors

their

Under ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced May 22, 1908

Survey completed June 1, 1908

6-161

*high 55-69-68*  
*low 4-29-74*

*60.19.42*

## NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chairman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

For preliminary affidavits see book "G" T. 23 S., R. 18 E.

BOOK A-349

INDEX DIAGRAM.

Township 23 South, Range 20 EAST

6	53	6	38	4	28	7	19	2	10	1
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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of \_\_\_\_\_

\_\_\_\_\_, Chainman

\_\_\_\_\_, Chainman

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, Moundman

\_\_\_\_\_, Moundman

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



WE, \_\_\_\_\_ and \_\_\_\_\_  
do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, Axman

\_\_\_\_\_, Axman

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



I, \_\_\_\_\_, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of \_\_\_\_\_

\_\_\_\_\_, Flagman

Subscribed and sworn to before me this \_\_\_\_\_ }  
day of \_\_\_\_\_, 190 \_\_\_\_\_ }



## SUBDIVISIONS OF T. 23 S., R. 20 E.

Survey commenced, May 22, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the cor. of secs. 1-2-35 and 36, heretofore described, on the S. bdy. of the Tp., in approximate latitude  $38^{\circ}46'N.$ , longitude,  $109^{\circ}42'W.$ , I set off  $38^{\circ}46'N.$ , on lat. arc,  $20^{\circ}28'N.$ , on decl. arc, and at 3h.56m., p.m., l.m.t., determine with the solar a meridian and mark a point there-  
of on a stone, firmly set in the ground, 5 chs. N. of the cor.

May 22, 1908.

May 23 : At 3h.31m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions and mark a point in the line thus determined on a peg, driven in the ground, 5 chs. N. of my station.

At 7 a.m., I lay off the azimuth of Polaris,  $1^{\circ}31'$  to the west, and mark the meridian thus determined by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. west of the mark determined by the solar.

At 6h.57m., a.m., l.m.t., I set off  $38^{\circ}46'N.$ , on lat. arc,  $20^{\circ}36'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone, already set 5 chs. N. of my station; this mark falls 0.5 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about  $0'26''$  east and west of the meridian established by the Polaris observations, therefore, I conclude that the adjustments

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h.30m., a.m., is N.16°00'W., the angle thus determined gives the mag. decl. 16°00'E.

From the cor. of secs. 1-2-35 and 36, heretofore described I run

N.0°01'W., bet. secs. 35 and 36.

Ascend abruptly over solid sandstone.

16.00 Sandstone ridge, bears NW. and SE.

Descend abruptly over solid sandstone.

32.50 Foot of sandstone ledges, bearing NW. and SE.

Descend through scattering timber.

40.00 Set a sandstone, 15x8x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A cedar, 15 ins. diam., bears S. 51°E., 63 lks. dist., marked  $\frac{1}{4}$  S 36 BT.

A cedar, 8 ins. diam., bears S. 62°W., 83 lks. dist., marked  $\frac{1}{4}$  S 35 BT.

53.80 Hollow, 150 ft. deep, course SE.

Leave timber.

Abrupt ascent over broken sandstone ledges.

80.00 Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked with 1 notch on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land mountainous.

Soil, rocky, 4th. rate ; sandy, 3rd. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- S.  $89^{\circ}56'$  E., on a random line, bet. secs. 25 and 36.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.12 Intersect E. bdy. of Tp., 19 lks. N. of the cor. of secs. 25-30-31 and 36, heretofore described.
- Thence I run
- $N. 89^{\circ}48'$  W., on a true line,  
Bet. secs. 25 and 36.
- Gradual ascent, through dense undergrowth.
- 31.00 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.
- 40.06 Set a sandstone, 15x9x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- 43.00 Rocky spur, projects SE.
- Abrupt descent.
- 45.50 Hollow, 75 ft. deep, course SE.
- Abrupt ascent.
- 49.50 Rocky ridge, bears NW. and SE.
- Abrupt descent.
- 56.00 Hollow, 100 ft. deep, course S.
- Abrupt ascent.
- 58.00 Rocky spur, projects S.
- Abrupt descent.
- 62.00 Hollow, 100 ft. deep, course S.
- Abrupt ascent.
- 71.00 Sandstone spur, projects S.
- Abrupt descent.
- 80.12 The cor. of secs. 25-26-35 and 36.
- Land mountainous, and rolling.
- Soil, loam, 1st. rate ; rocky, 3rd. and 4th. rate.
- No timber.
- Undergrowth, greasewood and sage.

SUBDIVISIONS OF T. 23 S., R. 20 E.

CHAINS

Land covered with dense undergrowth or mountainous land on 80.12 chs.

---

N.0°01'W., bet. secs. 25 and 26.

Ascend abruptly over rocky and mountainous land.

34.00 Ridge, bears NW. and SE.

Abrupt descent.

40.00 Set a sandstone, 20x10x9 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

62.00 Foot of abrupt descent, bears NW. and SE.

Descend through dense undergrowth.

80.00 Set a sandstone, 15x10x5 ins., 10 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked with 2 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land rolling and mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

May 23 : At this cor. I set off 20°37'N., on decl. arc, and at 11h.57m., a.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 38°48'N.

---

S.89°48'E., on a random line, bet. secs. 24 and 25.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect E. bdy. of Tp., 19 lks. S. of the cor. of secs. 19-24-25 and 30, heretofore described.

Thence I run

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

N.89°56'W., on a true line,

Bet. secs. 24 and 25.

Gradual ascent, through dense undergrowth.

10.75 Road, bears NW. and SE.

40.01 Set a sandstone, 18x7x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

80.02 The cor. of secs. 23-24-25 and 26.

Land rolling.

Soil, sandy, 2nd. rate.

No timber.

Land covered with dense undergrowth on 80.02 chs.

N.0°01'W., bet. secs. 23 and 24.

Gradual descent over rolling land, through dense undergrowth.

40.00 Set a sandstone, 18x7x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

68.50 Road, bears NW. and SE.

80.00 Set a sandstone, 18x7x5 ins., 12 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked with 3 notches on S. and 1 notch on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land rolling.

Soil, sandy, 2nd. rate.

No timber.

Land covered with dense undergrowth on 80.00 chs.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- S.89°56'E., on a random line, bet. secs. 13 and 24.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.98 Intersect E. bdy. of Tp., 7 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.
- Thence I run
- N.89°59'W., on a true line,
- Bet. secs. 13 and 24.
- Gradual ascent over rolling land, through dense undergrowth.
- 39.99 Set a sandstone, 18x6x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 79.98 The cor. of secs. 13-14-23 and 24.
- Land rolling.
- Soil, sandy, 2nd. rate.
- No timber.
- Land covered with dense undergrowth on 79.98 chs.
- 
- N.0°01'W'. bet. secs. 13 and 14.
- Gradual ascent, through dense undergrowth.
- 40.00 Set a sandstone, 20x8x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.
- 40.50 Begin abrupt ascent over broken sandstone ledges and boulders, bears NW. and SE.
- 77.00 Rocky ridge, 250 ft. above  $\frac{1}{4}$  sec. cor., bears NW. and SE.
- Descend.
- 80.00 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked with 4 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Land rolling and mountainous.

Soil, sandy, 2nd. rate ; rocky, 3rd. and 4th. rate.

No timber.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

May 23, 1908

May 24: At 7h.57m., a.m., l.m.t., I set off  $38^{\circ}50'N.$ , on lat. arc,  $20^{\circ}47'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 11-12-13 and 14.

Thence I run

$S.89^{\circ}59'E.$ , on a random line, bet. secs. 12 and 13.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect E. bdy. of Tp., 5 lks. N. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

$N.89^{\circ}57'W.$ , on a true line,

Bet. secs. 12 and 13.

Ascend over rocky and mountainous land through scattering cedar and pinon timber.

0.60 Spur, projects N.

Descend.

5.00 Hollow, 75 ft. deep, course NE.

Ascend.

22.20 Ridge, bears NE. and SW.

Descend.

32.00 Hollow, 100 ft. deep, course NE.

Ascend. Leave timber.

40.02 Ridge, bears NE. and SW.

Set a sandstone, 15x12x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

Descend.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 57.50 Head of hollow, course NW.  
Ascend.
- 80.04 The cor. of secs. 11-12-13 and 14.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.04 chs.
- 
- N.0°01'W., bet. secs. 11 and 12.
- Descend over mountainous land.
- 19.50 Hollow, 100 ft. deep, course NW.  
Ascend.  
Enter scattering timber.
- 23.00 Spur, projects SW.  
Descend.
- 26.00 Hollow, 75 ft. deep, course NW.  
Ascend.
- 28.00 Rocky Spur, projects NW.  
Descend.
- 40.00 Set a sandstone, 18x9x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which  
A pinon, 12 ins. diam., bears S.47°W., 196 lks. dist.  
marked  $\frac{1}{4}$  S 11 BT.  
A cedar, 6 ins. diam., bears S.57°E., 129 lks. dist.,  
marked  $\frac{1}{4}$  S 12 B T.
- 51.00 Hollow, 100 ft. deep, course NE.  
Ascend.
- 68.00 Spur, projects NE.  
Descend.
- 77.50 Hollow, 75 ft. deep, course NE.  
Ascend.  
Leave timber.
- 80.00 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and

## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
	<p>1 notch on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.</p> <p>Pits impracticable.</p> <p>Land, mountainous.</p> <p>Soil, rocky, 3rd. and 4th. rate.</p> <p>Timber, cedar and pinon.</p> <p>Mountainous land on 80.00 chs.</p> <p>May 24 : At this cor. I set off 20°49'N., on decl. arc, and at 11h.57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°50'N.</p>
	<p>S. 89°57'E., on a random line, bet. secs. 1 and 12.</p>
40.00	Set temp. ¼ sec. cor.
80.08	<p>Intersect E. bdy. of Tp., 3 lks. N. of the cor. of secs. 1-6-7 and 12, heretofore described.</p> <p>Thence I run</p> <p style="text-align: center;">N. 89°56'W., on a true line,</p> <p style="text-align: center;">Bet. secs. 1 and 12.</p> <p>Ascend over rocky and mountainous land, through scattering cedar and pinon timber.</p>
32.50	<p>Sandstone spur, projects N.</p> <p>Abrupt descent, over solid sandstone.</p>
40.04	<p>Falls on the solid sandstone, I cut a cross, (X), at exact point for ¼ sec. cor., mark ¼ on N. side of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.</p> <p>Pits impracticable.</p>
45.00	<p>Hollow, 150 ft. deep, course NE.</p> <p>Abrupt ascent.</p>
69.00	<p>Spur, projects NE.</p> <p>Descend.</p> <p>Leave timber.</p>
79.00	<p>Hollow, 75 ft. deep, course NE.</p> <p>Ascend.</p>
80.08	The cor. of secs. 1-2-11 and 12.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.08 chs.

N.0°01'W., on a random line, bet. secs. 1 and 2.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

83.18 Intersect N. bdy. of Tp., 12 lks. W. of the cor. of secs.  
1-2-35 and 36, heretofore described.

Thence I run

S.0°04'W., on a true line,

Bet. secs. 1 and 2.

Ascend abruptly over rocky and mountainous land, through  
scattering cedar and pinon timber.

3.25 Ridge, bears NE. and SW.

Abrupt descent.

12.00 Hollow, 100 ft. deep, course E.

Ascend abruptly over broken land.

43.18 Set a sandstone, 12x11x4 ins., in a mound of stone, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A pinon, 8 ins. diam., bears N.52°E., 10 lks. dist.,  
marked  $\frac{1}{4}$  S 1 BT.

A cedar, 5 ins. diam., bears S.48°W., 55 lks. dist.,  
marked  $\frac{1}{4}$  S 2 BT.

On account of natural obstacles this cor. cannot be set in

48.00 Ridge, bears NE. and SW. Descend.

52.00 N. edge of chasm with perpendicular walls, 150 ft. high,  
bears NE. and SW., chasm drains east.

56.00 S. edge of chasm, bears NE. and SW.

Ascend.

71.00 Sandstone ridge, bears NW. and SE.

Descend.

73.00 Hollow, 75 ft. deep, course W.

## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
	Ascend.
	Leave timber.
78.00	Ridge, bears NE. and SW.
	Descend.
83.18	The cor. of secs. 1-2-11 and 12.
	Land, mountainous.
	Soil, rocky, 3rd. and 4th. rate.
	Timber, cedar and pinon.
	Mountainous land on 83.18 chs.
	May 24, 1908.
	May 25 : At 6h.57m., a.m., l.m.t., I set off $38^{\circ}46'N.$ , on lat. arc, $20^{\circ}58'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 2-3-34 and 35, heretofore described on the S. bdy. of the Tp.
	Thence I run
	$N.0^{\circ}01'W.$ , bet. secs. 34 and 35.
	Ascend over mountainous land.
7.50	Begin abrupt ascent over solid sandstone, bearing NW. and SE.
	Enter scattering cedar and pinon timber.
30.00	Ridge, bears NE. and SW.
	Abrupt descent. Leave timber.
36.50	Hollow, 100 ft. deep, course SW.
	Abrupt ascent.
39.00	Sandstone spur, projects SW.
	Descend.
40.00	Set a sandstone, 15x12x4 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
42.50	Hollow, 100 ft. deep, course SW.
	Abrupt ascent.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 52.00 Sandstone ridge, bears NW. and SE.  
Abrupt descent.
- 58.00 Hollow, 150 ft. deep, course NW.  
Abrupt ascent over solid sandstone.
- 68.00 Sandstone spur, projects W.  
Descend.
- 74.00 Hollow, 150 ft. deep, course SW.  
Abrupt ascent over solid sandstone.
- 80.00 Point for cor. falls on the smooth surface of the solid sandstone; I cut a cross (X), at exact point for cor of secs. 26-27-34 and 35, mark 1 groove on S. and 2 grooves on E. sides of cross, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, sandy, 3rd. rate, rocky, 4th. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.00 chs.
- 
- S.  $89^{\circ}56'E.$ , on a random line, bet. secs. 26 and 35.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.06 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 25-26-35 and 36.  
Thence I run  
N.  $89^{\circ}55'W.$ , on a true line,  
Bet. secs. 26 and 35.  
Descend abruptly over rocky and mountainous land.
- 14.00 Hollow, 150 ft. deep, course SE.  
Abrupt ascent.
- 38.50 Ridge, bears N. and S.  
Descend.
- 40.03 Set a sandstone,  $20 \times 20 \times 3$  ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,

SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	<p>2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.</p>
48.00	<p>Hollow, 100 ft. deep, course NW. Abrupt ascent.</p>
54.00	<p>Sandstone spur, projects N. Descend over solid sandstone.</p>
74.00	<p>Hollow, 150 ft. deep, course SW. Ascend over solid sandstone.</p>
80.06	<p>The cor. of secs. 26-27-34 and 35. Land mountainous. Soil, sandy, 3rd. rate : solid sandstone, 4th. rate. No timber. Mountainous land on 80.06 chs. May 25 : At this cor. I set off 25° 59' N., on decl. arc, and at 11h. 57m., a.m., 1. mlt., observe the sun on the meridian, the resulting lat. is 38° 47' N.</p>
	<p>N. 0° 01' W., bet. secs. 26 and 27.</p>
	<p>Ascend over solid sandstone.</p>
33.00	<p>Sandstone spur, projects SE. Abrupt descent.</p>
40.00	<p>Set a sandstone, 20x14x3 ins., 15 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.</p>
44.00	<p>Hollow, 150 ft. deep, course SE. Ascend abruptly over solid sandstone.</p>
80.00	<p>Falls on the smooth surface of the solid sandstone: I cut a cross, (X), at exact point for cor. of secs. 22-23-26 and 27, mark 2 grooves on S. and E. sides of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land mountainous. Soil, solid sandstone, 4 th. rate.</p>

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

No timber.

Mountainous land on 80.00 chs.

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S. 89°55'E., on a random line, bet. secs. 23 and 26.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

20.14 Intersect N. and S. line, 3 lks. S. of the cor. of secs.  
23-24-25 and 26.

Thence I run

N 89°50'W., on a true line,

Bet. secs. 23 and 26.

Ascend through dense undergrowth.

0.75 Begin abrupt ascent over mountainous land, bearing N. and S.

20.25 Rocky spur, projects NE.

Abrupt descent.

26.50 Hollow, 125 ft. deep, course NE.

Abrupt ascent over solid sandstone.

32.00 Sandstone ridge, bears NW. and SE.

Abrupt descent.

Enter scattering cedar and pinon timber.

40.07 Set a sandstone, 15x12x3 ins., 10 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, from which

A cedar, 12 ins. diam., bears S. 67°E., 55 lks. dist.,  
marked  $\frac{1}{4}$  S 26 BT.

A cedar, 8 ins. diam., bears N. 15°E., 73 lks. dist.,  
marked  $\frac{1}{4}$  S 23 BT.

54.50 Hollow, 150 ft. deep, course S.

Abrupt ascent over solid sandstone.

80.14 The cor. of secs. 22-23-26 and 27.

Land rolling and mountainous.

Soil, sandy, 3rd. rate : rocky, 4th. rate.

Timber, cedar and pinon.

Undergrowth, greasewood.

Mountainous land, or land covered with dense undergrowth,  
on 80.14 chs.

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## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS

N.0°01'W., bet. secs. 22 and 23.

Ascend abruptly over solid sandstone.

37.50 Sandstone ridge, bears NW. and SE.

Descend abruptly over sandstone boulders.

40.00 Falls on a sandstone boulder, 12x10x5 ins. above ground,  
I cut a cross, (X), at exact point for  $\frac{1}{4}$  sec. cor., mark  $\frac{1}{4}$  on  
W. side of cross, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$   
ft. high, W. of cor.

Pits impracticable.

48.00 Hollow, 200 ft. below top of ridge, course E.

Ascend.

59.50 Spur, projects E.

Abrupt descent.

68.50 Foot of abrupt descent, bears NW. and SE.

Descend over rolling land, through dense undergrowth.

80.00 Set a sandstone, 16x8x4 ins., 11 ins. in the ground, for cor.  
of secs. 14-15-22 and 23, marked with 3 notches on S. and  
2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  
5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft.  
high, W. of cor.

Land, mountainous and rolling.

Soil, rocky, 4th. rate ; sandy, 3rd. rate.

No timber.

Undergrowth, greasewood.

Mountainous land, or land covered with dense undergrowth  
on 80.00 chs.

May 25, 1908

May 26 : At 7h.57m., a.m., l.m.t., I set off 38°49'N., on  
lat. arc, 21°09'N. on decl. arc, and determine a meridian  
with the solar, at the cor. of secs. 14-15-22 and 23.

Thence I run

S. 89°56'E., on a random line, bet. secs. 14 and 23.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

## SUBDIVISIONS OF T.23 S., R.20 W.

## CHAINS

- 79.96 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 13-14-23 and 24.  
Thence I run  
N. 89° 54' W., on a true line,  
Bet. secs. 14 and 23.  
Ascend over rolling land, through dense undergrowth.
- 12.50 Road, bears NW. and SE.
- 39.98 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 79.96 The cor. of secs. 14-15-22 and 23.  
Land, rolling.  
Soil, sandy, 3rd. rate.  
No timber.  
Undergrowth, sage and greasewood.  
Land covered with dense undergrowth on 79.96 chs.  
  
N. 0° 01' W., bet. secs. 14 and 15.  
Descend over rolling land, through dense undergrowth.
- 40.00 Set a sandstone, 18x8x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Begin rolling ascent.
- 67.25 Road, bears NW. and SE.
- 80.00 Set a sandstone, 15x13x4 ins., 10 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked with 4 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.  
Soil, sandy, 2nd. and 3rd. rate.  
No timber.

## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
	Undergrowth, greasewood and sage. Land covered with dense undergrowth on 80.00 chs.
	S. 89°54'E., on a random line, bet. secs. 11 and 14.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.16	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 11-12-13 and 14. Thence I run N. 89°53'W., on a true line, Bet. secs. 11 and 14. Ascend over mountainous land, through scattering cedar and pinon timber.
8.00	Sandstone ridge, bears NW. and SE. Descend over solid sandstone,
19.00	Begin abrupt descent, bearing NW. and SE.
40.08	Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, from which A cedar, 6 ins. diam., bears S. 35°E., 11 lks. dist., marked $\frac{1}{4}$ S 14 BT. A pinon, 7 ins. diam., bears N. 48°W., 63 lks. dist., marked $\frac{1}{4}$ S 11 BT.
68.00	Foot of abrupt descent, bears NW. and SE. Leave timber and sandstone ledges. Descend over rolling land, through dense undergrowth.
80.16	The cor. of secs. 10-11-14 and 15. Land, mountainous and rolling. Soil, Rocky, 3rd. and 4th. rate; sandy, 3rd. rate. Timber, cedar and pinon. Undergrowth, greasewood and sage. Mountainous land or land covered with dense undergrowth on 80.16 chs. May 26 : At this cor. I set off 21°10' N. on decl. arc, and at 11h. 57m., a.m., l.m.t., observe the sun on the meridian,

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

the resulting lat. is  $38^{\circ}50'N$ .

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$N.0^{\circ}01'W.$ , bet. secs. 10 and 11.

Ascend over rolling land, through dense undergrowth.

14.00 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.

Enter scattering timber.

40.00 Set a sandstone,  $15 \times 12 \times 5$  ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A cedar, 4 ins. diam., bears  $S.23^{\circ}E.$ , 31 lks. dist., marked  $\frac{1}{4}$  S 11 BT.

A pinon, 5 ins. diam., bears  $S.25^{\circ}W.$ , 98 lks. dist., marked  $\frac{1}{4}$  S 10 BT.

51.00 Sandstone ridge, bears NW. and SE.

Abrupt descent.

65.00 Hollow, 100 ft. deep, course NE.

Ascend.

67.00 Leave timber.

77.50 Spur, projects E.

Descend.

80.00 Hollow, 75 ft. deep, course E.

Set a sandstone,  $15 \times 9 \times 6$  ins., 10 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked with 5 notches on S. and 2 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling and mountainous.

Soil, sandy, 3rd. rate: rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous land on 80.00 chs.

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## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
	S.89°53'E., on a random line, bet. secs. 2 and 11.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.02	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 1-2-11 and 12.
	Thence I run
	N.89°52'W., on a true line,
	Bet. secs. 2 and 11.
	Ascend abruptly over mountainous land.
5.00	Ridge, bears NE. and SW.
	Abrupt descent, over sandstone ledges.
	Enter scattering timber.
34.00	Leave sandstone ledges and timber, bear N. and S.
	Descend over sandy land.
40.01	Set a sandstone, 15x10x9 ins., 10 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
40.50	Hollow, 100 ft. deep, course NE.
	Ascend.
47.00	Spur, projects NE.
	Descend.
50.00	Junction of hollow from W. with hollow from SW.
	Ascend along hollow.
80.02	The cor. of secs. 2-3-10 and 11.
	Land, mountainous.
	Soil, sandy and rocky, 3rd. and 4th. rate.
	Timber, cedar and pinon.
	Mountainous land on 80.02 chs.
	N.0°01'W., on a random line, bet. secs. 2 and 3.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
83.13	Intersect N. bdy. of Tp., 5 lks. W. of the cor. of secs. 2-3-34 and 35, heretofore described.
	Thence I run

SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS

S.0°01'W., on a true line,  
Bet. secs. 2 and 3.

Ascend abruptly over solid sandstone, through scattering cedar and pinon timber.

39.75 Ridge, NW. and SE.

Leave timber.

Descend over broken sandstone ledges.

43.13 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for 1/4 sec. cor., marked 1/4 on W. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, W. of cor.

Pits impracticable.

62.15 Top of perpendicular sandstone ledge, 100 ft. high, bears E. and W.

63.00 Foot of ledge.

Descend over sandy land.

83.13 The cor. of secs. 2-3-10 and 11.

Land, mountainous.

Soil, sandy and rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 83.13

May 26, 1908.

May 27 : At 6h.57m., a.m., l.m.t., I set off 38°46'N., on lat. arc, 21°19'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 3-4-33 and 34, heretofore described on the S. bdy. of the Tp.

Thence I run

N.0°02'W., bet. secs. 33 and 34.

Ascend in hollow, course S. over mountainous land.

29.00 Ridge, bears E. and W.

Descend.

40.00 Set a lava stone, 16x8x5 ins., 11 ins. in the ground, for 1/4

SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
	sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, $5\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
80.00	Set a sandstone, 15x12x6 ins., 10 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked with 1 notch on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor. Pits impracticable. Land, mountainous. Soil, rocky, 3rd. rate. No timber. Mountainous land on 80.00 chs.
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	S. $89^{\circ}56'E.$ , on a random line, bet. secs. 27 and 34.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.84	Intersect N. and S. line, 17 lks. N. of the cor. of secs. 26-27-34 and 35. Thence I run N. $89^{\circ}49'W.$ , on a true line, Bet. secs. 27 and 34. Ascend over solid sandstone.
2.50	Sandstone spur, projects S. Abrupt descent.
24.75	Hollow, 150 ft. deep, course SW. Abrupt ascent.
39.92	Set a sandstone, 12x9x5 ins., 8 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
44.00	Ridge, bears N. and S. Abrupt descent.
77.00	Hollow, 150 ft. deep, course NW. Ascend.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 79.84 The cor. of secs. 27-28-33 and 34.  
 Land mountainous.  
 Soil, sandy and rocky, 3rd. and 4th. rate.  
 No timber.  
 Mountainous land on 79.84 chs.
- 
- N.0°02'W., bet. secs. 27 and 28.
- Descend over rocky and mountainous land.
- 0.25 Hollow, 100 ft. deep, course SW.  
 Abrupt ascent.
- 4.50 Enter scattering timber.
- 10.00 Ridge, bears NE. and SW.  
 Descend.
- 11.75 Hollow, 75 ft. deep, course W.  
 Abrupt ascent over solid sandstone.
- 40.00 Set a sandstone, 15x12x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which  
 A cedar, 4 ins. diam., bears N.46°E., 41 lks. dist.,  
 marked  $\frac{1}{4}$  S 27 BT.  
 A pinon, 5 ins. diam., bears N.50°30'W., 55 lks. dist.,  
 marked  $\frac{1}{4}$  S 28 BT.
- 60.00 Sandstone ridge, bears E. and W.  
 Descend.
- 71.00 Hollow, 150 ft. deep, course W.  
 Abrupt ascent.
- 76.00 Rocky spur, projects W.  
 Abrupt descent.
- 79.00 Hollow, 150 ft. deep, course W.  
 Ascend.
- 80.00 Set a sandstone, 15x12x6 ins., 10 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked with 2 notches on S. and 3 notches on E. edges, from which  
 A cedar, 7 ins. diam.; bears N.89°E'. 107 lks. dist.,

## SUBDIVISIONS OF T. 23 S., R. 20 E.

## CHAINS

marked T 23 S R 20 E S 22 BT.

A cedar, 24 ins. diam., bears S.  $45^{\circ}$  E., 72 lks. dist.,

marked T 23 S R 20 E S 27 BT.

A cedar, 5 ins. diam., bears S.  $14^{\circ}$  W., 72 lks. dist.,

marked T 23 S R 20 E S 28 BT.

A cedar, 5 ins. diam., bears N.  $23^{\circ}$  W., 103 lks. dist.,

marked T 23 S R 20 E S 21 BT.

Land, mountainous.

Soil, sandy and rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

May 27 : At this cor. I set off  $21^{\circ} 20'$  N., on decl. arc, and at 11h. 57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ} 48'$  N.

S.  $89^{\circ} 49'$  E., on a random line, bet. secs. 22 and 27.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.08 Intersect N. and S. line, 19 lks. S. of the cor. of secs. 22-23-26 and 27.

Thence I run

N.  $89^{\circ} 57'$  W., on a true line,

bet. secs. 22 and 27.

Ascend along steep south slope over solid sandstone.

40.04 Sandstone ridge, bears NE. and SW.

Set a sandstone, 15x12x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

Descend.

45.00 Enter scattering cedar and pinon timber.

80.08 The cor. of secs. 21-22-27 and 28.

Land mountainous.

Soil, solid sandstone, 4th. rate.

Timber, cedar and pinon.

## SUBDIVISIONS OF T. 23 S., R. 20 E.

## CHAINS

Mountainous land on 80.08 chs.

N. 0° 02' W., bet. secs. 21 and 22.

Ascend abruptly over solid sandstone, along steep west slope, through scattering timber.

40.00 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A pinon, 15 ins. diam., bears S. 37° E., 59 lks. dist., marked  $\frac{1}{4}$  S 22 BT.

A pinon, 6 ins. diam., bears S. 89° W., 31 lks. dist., marked  $\frac{1}{4}$  S 21 BT.

80.00 Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked with 3 notches on S. and E. edges, from which

A pinon, 7 ins. diam., bears N. 32° E., 58 lks. dist., marked T 23 S R 20 E S 15 BT.

A pinon, 7 ins. diam., bears S. 36° E., 38 lks. dist., marked T 23 S R 20 E S 22 BT.

A pinon, 10 ins. diam., bears S. 17° W., 28 lks. dist., marked T 23 S R 20 E S 21 BT.

A pinon, 8 ins. diam., bears N. 64° W., 41 lks. dist., marked T 23 S R 20 E S 16 BT.

Land, mountainous.

Soil, solid sandstone, 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

S. 89° 57' W., on a random line, bet. secs. 15 and 22.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.00 Intersect N. and S. line, 12 lks. N. of the cor. of secs. 14-15-22 and 23.

Thence I run

N. 89° 52' W., on a true line,

Bet. secs. 15 and 22.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Ascend abruptly over broken sandstone ledges and scattering cedar and pinon timber, bearing N. and S.

34.50 Sandstone ridge, bears NW. and SE.

Leave timber.

Abrupt descent.

40.06 Set a sandstone, 15x12x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

44.75 Hollow, 200 ft. deep, course NW.

Abrupt ascent.

51.60 Sandstone spur, projects NW.

Abrupt descent.

70.00 Enter scattering timber.

80.12 The cor. of secs. 15-16-21 and 22.

Land mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.12 chs.

May 27, 1908

May 28 : At 6h.57m., a.m., l.m.t., I set off 38°49'N., on lat. arc, 21°29'N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 15-16-21 and 22.

Thence I run

N. 0°02'W., bet. secs. 15 and 16.

Ascend over solid sandstone, through scattering timber.

40.00 Set a sandstone, 18x15x5 ins., in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

A cedar, 8 ins. diam, bears N. 48°W., 65 lks. dist., marked  $\frac{1}{4}$  S 16 BT.

A cedar, 5 ins. diam., bears S. 69°E., 55 lks. dist., marked  $\frac{1}{4}$  S 15 BT.

It is impossible to set this cor. in the ground on account

SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS

of natural obstacles.

49.50 Sandstone ridge, bears NW. and SE.

Descend abruptly over boulders.

71.00 Leave mountainous land, bears NW. and SE.

Descend over rolling land

80.00 Set a sandstone, 15x10x7 ins., 10 ins. in the ground, for  
71  
9  
cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and  
3 notches on E. edges, and raise a mound of stone, 2 ft. base,  
1½ ft. high, W. of cor.

Pits impracticable.

Land, mountainous and rolling.

Soil, rocky, 3rd. and 4th. rate ; sandy, 3rd. rate.

Timber, cedar and pinon.

Mountainous land on 71.00 chs.

S. 89° 52' E., on a random line, bet. secs. 10 and 15.

40.00 Set temp. ¼ sec. cor.

79.98 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 10-11-  
14 and 15.

Thence I run

N. 89° 55' W., on a true line,

Bet. secs. 10 and 15.

Ascend over rolling land.

22.75 Road, bears NW. and SE.

39.99 Set a sandstone, 20x12x4 ins., 15 ins. in the ground, for ¼  
sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and  
W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft.  
base, 1½ ft. high, N. of cor.

79.98 The cor. of secs. 9-10-15 and 16.

Land, rolling.

Soil, sandy, 3rd. rate.

No timber.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- N.0°02'W., bet. secs. 9 and 10
- Gradual descent over rolling land.
- 40.00 Set a sandstone, 18x10x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 41.75 Road, bears NW. and SE.  
Gradual ascent.
- 71.50 Begin abrupt ascent over sandstone ledges.
- 80.00 Set a sandstone, 18x10x7 ins., in a mound of stone, for cor. of secs. 3-4-9 and 10, marked with 5 notches on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 8.50  
71.50
- Pits impracticable.
- On account of natural obstacles, it is impossible to set this cor. in the ground.
- Land, rolling and mountainous.
- Soil, sandy, 2nd. and 3rd. rate ; rocky, 4th. rate.
- No timber.
- Mountainous land on 8.50 chs.
- May 28 : At this cor. I set off 21°30' N. on decl. arc, and at 11h. 57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°50' N.
- 
- S.89°55' E., on a random line, bet. secs. 3 and 10.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.12 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 2-3-10 and 11.
- Thence I run
- N.89°54' W., on a true line,  
Bet. secs. 3 and 10.
- Ascend over mountainous land, in hollow, course E.
- 4.50 Leave hollow, course from NW. to E.  
Abrupt ascent.

SUBDIVISIONS OF T. 23 S., R. 20 E.

CHAINS

- 21.00 Enter scattering cedar and pinon timber.
  - 40.06 Set a sandstone, 15x12x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, from which
    - A pinon, 7 ins. diam., bears N. 8° E., 32 lks. dist., marked  $\frac{1}{4}$  S 3 BT.
    - A cedar, 8 ins. diam., bears S. 26° W., 40 lks. dist., marked  $\frac{1}{4}$  S 10 BT.
  - 57.25 Sandstone ridge, bears NW. and SE.  
Leave timber.  
Abrupt descent over solid sandstone.
  - 80.12 The cor. of secs. 3-4-9 and 10.  
Land, mountainous.  
Soil, sandy and rocky, 3rd. and 4th. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.12 chs.
- 
- N. 0° 02' W., on a random line, bet. secs. 3 and 4.
  - 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
  - 83.12 Intersect N. bdy. of Tp., 19 lks. W. of the cor. of secs. 3-4-33 and 34, heretofore described.  
Thence I run
    - S. 0° 06' W., on a true line,  
Bet. secs. 3 and 4.
  - Abrupt ascent over solid sandstone, through scattering timber.
  - 4.75 Sandstone ridge, bears NW. and SE.  
Abrupt descent.
  - 8.00 Hollow, 100 ft. deep, course W.  
Abrupt ascent.
  - 22.25 Sandstone spur, projects W.  
Descend abruptly over solid sandstone.
  - 43.12 Set a sandstone, 15x8x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
	A cedar, 7 ins. diam., bears S. 56° E., 14 lks. dist., marked $\frac{1}{4}$ S 3 BT.
	A pinon, 18 ins. diam., bears N. 79° W., 58 lks. dist., marked $\frac{1}{4}$ S 4 BT.
43.75	Hollow, 150 ft. deep, course NW. Abrupt ascent.
71.00	Sandstone ridge, bears NW. and SE. Leave timber. Abrupt descent over solid sandstone.
83.12	The cor. of secs. 3-4-9. and 10. Land, mountainous. Soil, rocky and sandy, 3rd. and 4th. rate. Timber cedar and pinon. Mountainous land on 83.12 chs.
	May 28, 1908.
	<hr/>
	May 29 : At 6h. 57m., a.m., l.m.t., I set off 38° 46' N., on lat. arc, 21° 38' N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 4-5-32 and 33, heretofore described on the S. bdy. of the Tp. thence I run N. 0° 03' W., bet. secs. 32 and 33. Descend over rocky and mountainous land.
4.10	Hollow, 100 ft. deep, course SW. Ascend.
40.00	Set a sandstone, 18x10x7 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor. Pits impracticable.
43.50	Enter scattering timber.
57.50	Rocky ridge, bears NE. and SW. Descend.
64.00	Hollow, 100 ft. deep, course SW. Leave timber.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Ascend.

80.00 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked with 1 notch on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 80.00 chs.

S. 89° 56' E., on a random line, bet. secs. 28 and 33.

40.00 Set temp. ¼ sec. cor.

79.96 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 27-28-33 and 34.

Thence I run

N. 89° 54' W., on a true line,

Bet. secs. 28 and 33.

Descend over rocky and mountainous land.

0.25 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

2.10 Rocky spur, projects S.

Descend.

22.50 Same hollow, 100 ft. deep, course NW.

Ascend.

39.70 Begin abrupt ascent, bears NW. and SE.

39.98 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

51.00 Ridge, bears NW. and SE.

Abrupt descent.

56.50 Hollow, 75 ft. deep, course S.

Abrupt ascent.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 60.75 Ridge, bears NW. and SW.  
Abrupt descent.
- 79.96 The cor. of secs. 28-29-32 and 33.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
No timber.  
Mountainous land on 79.96 chs.
- N. 0° 03' W., bet. secs. 28 and 29.
- Ascend over rocky and mountainous land.
- 24.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 40.00 Set a lava stone, 15x8x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 48.00 Foot of abrupt descent, bears E. and W.  
Enter wide hollow, course W.  
Enter dense undergrowth.
- 56.00 Wash, 1.00 ch. wide, 5 ft. deep, course SW.
- 80.00 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for cor. of secs. 20-21-28 and 29, marked with 2 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
No timber.  
Undergrowth, greasewood.  
Mountainous land on 80.00 chs.  
May 29 : At this cor. I set off  $21^{\circ} 39' N.$ , on decl. arc, and at 11h. 57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ} 48' N.$

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- S. 89°54'E., on a random line, bet. secs. 21 and 28.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.02 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 21-22-27 and 28.
- Thence I run
- N. 89°56'W., on a true line,
- Bet. secs. 21 and 28.
- Abrupt descent, over solid sandstone, through scattering timber.
- 8.00 Hollow, 100 ft. deep, course SW.
- Abrupt ascent.
- 15.00 Sandstone ridge, bears N. and S.
- Abrupt descent.
- 32.00 Hollow, 100 ft. deep, course SW.
- Abrupt ascent.
- 39.00 Sandstone spur, projects S.
- Abrupt descent.
- 40.01 Set a sandstone, 15x12x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, from which
- A pinon, 5 ins. diam., bears N. 51°E., 60 lks. dist.,
- marked  $\frac{1}{4}$  S 21 BT.
- No other trees within limits, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- 44.00 Hollow, 75 ft. deep, course S.
- Abrupt ascent.
- 48.00 Spur, projects S.
- Abrupt descent.
- 70.00 Enter wide hollow, drains SW.
- Enter dense undergrowth.
- 80.02 The cor. of secs. 20-21-28 and 29.
- Land, mountainous.
- Soil, sandy and rocky, 3rd. and 4th. rate.
- Timber, cedar and pinon.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- Undergrowth, greasewood.  
Mountainous land on 80.02 chs.
- N.0°03'W., bet. secs. 20 and 21.
- Ascend over mountainous land, through dense undergrowth.  
9.50 Begin abrupt ascent over solid sandstone, bearing NW.  
and SE.  
Enter scattering timber.
- 33.85 Sandstone spur, projects SW.  
Descend.
- 35.50 Hollow, 75 ft. deep, course SW.  
Abrupt ascent.
- 40.00 Set a sandstone, 15x10x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on W. face, from which  
A pinon, 5 ins. diam., bears S.2°W., 59 lks. dist.,  
marked  $\frac{1}{4}$  S 20 BT.  
No other trees within limits, and raise a mound of stone,  
2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 64.00 Sandstone spur, projects SW.  
Abrupt descent.
- 71.00 Hollow, 150 ft. deep, course SW.  
Abrupt ascent.
- 79.50 Sandstone ridge, bears NE. and SW.  
Descend.
- 80.00 A pinon tree, 5 ins. diam., for cor. of secs. 16-17-20 and 21,  
I mark T 23 S S 16 on NE.,  
R 20 E S 21 on SE.,  
S 20 on SW., and  
S 17 on NW. side, with 3 notches on S. and 4 notches  
on E. sides, from which  
A pinon, 14 ins. diam., bears S.39°30'E., 50 lks. dist.,  
marked T 23 S R 20 E S 21 BT.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- No other trees within limits, and raise a mound of stone around tree. Pits impracticable.
- Land mountainous.
- Soil, rocky, 3rd. and 4th. rate.
- Timber, cedar and pinon.
- Undergrowth, greasewood.
- Mountainous land on 80.00 chs.
- 
- S. 89°56'E., on a random line, bet. secs. 16 and 21.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.06 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 15-16-21 and 22.
- Thence I run
- N. 89°54'W., on a true line,
- Bet. secs. 16 and 21.
- Descend abruptly over solid sandstone, through scattering dwarfed timber.
- 32.00 Hollow, 100 ft. deep, course SW.
- Ascend over rocky land.
- 36.00 Spur, projects SE.
- Abrupt descent.
- 40.03 Set a sandstone, 15x10x8 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- 47.00 Hollow, 100 ft. deep, course S.
- Abrupt ascent.
- 57.35 Ridge, bears N. and S. Abrupt descent.
- 70.00 Hollow, 150 ft. deep, course SW.
- Abrupt ascent.
- 75.30 Sandstone spur, projects SW.
- Abrupt descent.
- 77.00 Hollow, 75 ft. deep, course SW.
- Abrupt ascent.
- 79.00 Sandstone ridge, bears NE. and SW.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Descend.

80.06 The cor. of secs. 16-17-20 and 21.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, scattering cedar and pinon.

Mountainous land on 80.06 chs.

May 29. 1908

May 30 : At 6h.57m., a.m., l.m.t., I set off  $38^{\circ}49'N.$ , on lat. arc,  $21^{\circ}47'N.$ , on decl. arc, and determine a meridian with the solar at the cor. of secs. 16-17-20 and 21.

Thence I run

$N.0^{\circ}03'W.$ , bet. secs. 16 and 17.

Descend abruptly over solid sandstone, through scattering timber.

23.50 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

26.00 Ridge, bears NE. and SW.

Abrupt descent.

29.00 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

31.00 Spur, projects SW.

descend.

40.00 Hollow, 150 ft. deep, course SW.

Set a sandstone, 18x8x6 ins., in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

On account of natural obstacles, it is impossible to set this cor. in the ground.

Ascend abruptly over sandstone ledges.

63.00 Sandstone ridge, bears NE. and SW.

Abrupt descent.

80.00 Set a sandstone, 20x8x7 ins., 15 ins. in the ground, for

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- cor. of secs. 8-9-16 and 17, marked with 4 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.
- There are no suitable bearing trees within limits.
- Land mountainous.
- Soil, rocky, 3rd. and 4th. rate.
- Timber, dwarfed cedar and pinon.
- Mountainous land on 80.00 chs.
- 
- S.  $89^{\circ}54'$  E., on a random line, bet. secs. 9 and 16.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.10 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 9-10-15 and 16.
- Thence I run
- N.  $89^{\circ}55'$  W., on a true line,
- Bet. secs. 9 and 16.
- Ascend over rolling land.
- 18.00 Begin abrupt ascent over rocky land, bearing NW. and SE.
- 32.00 Sandstone spur, projects N.
- Descend.
- 37.00 Hollow, 150 ft. deep, course NE.
- Abrupt ascent.
- 40.05 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- 49.00 Sandstone spur, projects NE.
- Abrupt descent.
- Enter scattering timber.
- 64.00 Hollow, 200 ft. deep, course N.
- Abrupt ascent.
- 75.50 Sandstone ridge, bears NW. and SE.
- Abrupt descent.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 80.10 The cor. of secs. 8-9-16 and 17.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, dwarfed, cedar and pinon.  
Mountainous land on 80.10 chs.
- 
- N. 0° 03' W., bet. secs. 8 and 9.
- Descend over rocky and mountainous land.
- 1.00 Head of hollow, course SW.  
Ascend.
- 4.50 Ridge, bears NW. and SE.  
Descend abruptly over broken sandstone ledges, through scattering timber.
- 34.00 Hollow, 150 ft. deep, course NE.  
Abrupt ascent over solid sandstone.
- 40.00 Falls on the smooth surface of the solid sandstone:  
I cut a cross, (X), at exact point for  $\frac{1}{4}$  sec. cor., mark  $\frac{1}{4}$  on W. side of cross, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 46.80 Sandstone ridge, bears NW. and SE.  
Abrupt descent.
- 53.00 Foot of abrupt descent, bears NW. and SE.  
Descend gradually over rolling land.  
Leave timber.
- 80.00 Set a sandstone, 15x9x6 ins., 10 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, mountainous and rolling.  
Soil, rocky, 3rd. and 4th. rate; sandy, 2nd. and 3rd. rate.  
Timber, cedar and pinon.  
Mountainous land on 53.00 chs.
- 53.00  
27.00

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- May 30 : At this cor. I set off  $21^{\circ}49'$  N., on decl. arc, and at 11h.57m., a.m. l.m.t., observe the sun on the meridian the resulting lat. is  $38^{\circ}50'$  N.
- 
- S.  $89^{\circ}55'$  E., on a random line, bet. secs. 4 and 9.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.04 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 3-4-9 and 10.
- Thence I run
- N.  $89^{\circ}56'$  W., on a true line,  
Bet. secs. 4 and 9.
- Descend abruptly over sandstone ledges and boulders.
- 10.75 Foot of abrupt descent, bears NW. and SE.
- Gradual ascent over rolling land.
- 40.02 Set a sandstone, 15x10x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 51.50 Road, bears NW. and SE.
- 80.04 The cor. of secs. 4-5-8 and 9.
- 10.75*  
*69.29*
- Land, mountainous and rolling.
- Soil, rocky, 4th. rate : sandy, 2nd. and 3rd. rate.
- No timber.
- Mountainous land on 10.75 chs.
- 
- N.  $0^{\circ}03'$  W., on a random line, bet. secs. 4 and 5.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 82.97 Intersect N. bdy. of Tp., 19 lks. W. of the cor. of secs. 4-5-32 and 33, heretofore described.
- Thence I run
- S.  $0^{\circ}05'$  W., on a true line,  
Bet. secs. 4 and 5.
- Ascend abruptly over solid sandstone, through scattering timber.

## SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS	
29.45	Rocky ridge, bears NW. and SE. Leave timber. Abrupt descent over sandstone ledges and boulders.
39.00	Foot of abrupt descent, bears NW. and SE. Gradual descent over rolling land.
42.97	Set a sandstone, 24x8x4 ins., 18 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
56.50	Road, bears NW. and SE.
82.97	The cor. of secs. 4-5-8 and 9.
39	Land mountainous and rolling.
43.97	Soil, rocky, 3rd. and 4th. rate; sandy, 2nd. and 3rd. rate. Timber, cedar and pinon. Mountainous land on 39.00 chs.
	May 30, 1908.
	May 31 : At 6h.57m., a.m., l.m.t., I set off $38^{\circ}46'N.$ , on lat. arc, $21^{\circ}56'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 5-6-31 and 32, heretofore described on the S. bdy. of the Tp. Thence I run
	N. $0^{\circ}03'W.$ , bet. secs. 31 and 32.
	Ascend over rolling land, through dense undergrowth.
40.00	Set a sandstone, 20x12x3 ins., 15 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, $3\frac{1}{2}$ ft. base, $1\frac{1}{2}$ ft. high, W. of cor.
56.00	Wash, 1.00 ch. wide, 6 ft. deep, course SE.
75.50	Same wash, 1.00 ch. wide, 6 ft. deep, course SW.
80.00	Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 29-30-31 and 32, marked with 1 notch on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, $1\frac{1}{2}$ ft. high, W. of cor.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Pits impracticable.

Land, rolling.

Soil, sandy, 2nd. and 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

---

S.89°56'E., on a random line, bet. secs. 29 and 32.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.12 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 28-29-32 and 33.

Thence I run

N.89°59'W., on a true line,

Bet. secs. 29 and 32.

Descend over rocky and mountainous land.

5.50 Hollow, 100 ft. deep, course SW.

Ascend.

11.70 Rocky spur, projects SW.

Descend.

23.00 Hollow, 100 ft. deep, course SW.

Ascend.

25.75 Rocky spur, projects SW.

Descend.

40.06 Set a sandstone, 16x8x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

45.00 Hollow, 75 ft. deep, course SW.

Ascend.

54.00 Spur, projects SW.

Descend.

75.00 Wash, 1.00 ch. wide, 6 ft. deep, in hollow, 75 ft. deep, course SW.

Ascend.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 77.50 Spur, projects SE.  
Descend.
- 80.12 The cor. of secs. 29-30-31 and 32.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
No timber.  
Mountainous land on 80.12 chs.
- 
- N. 89°56' W., on a random line, bet. secs. 30 and 31.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.71 Intersect W. bdy. of Tp., 5 lks. S. of the cor. of secs. 25-30-31 and 36, heretofore described.  
Thence I run  
S. 89°54' E., on a true line,  
Bet. secs. 30 and 31.  
Ascend over mountainous land.
- 11.00 Ridge, bears NW. and SE.  
Abrupt descent.
- 13.00 Foot of abrupt descent, bears N. and S.  
Gradual descent through dense undergrowth.
- 40.46 Telephone line, between Moab and Thompsons, bears NW. and SE.
- 40.71 Set a sandstone, 24x14x3 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 48.10 Road, from Moab to Thompsons, bears NW. and SE.
- 80.71 The cor. of secs. 29-30-31 and 32.  
Land, mountainous and rolling.  
Soil, clay, 3rd. rate ; sandy, 2nd. and 3rd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 80.71 chs.
-

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

N.0°03'W., bet. secs. 29 and 30.

Ascend over rocky and mountainous land.

3.50 Spur, projects SE.

Descend.

21.50 Hollow, 50 ft. deep, course SE.

Ascend.

34.00 Spur, projects SW.

Descend.

40.00 Hollow, 75 ft. deep, course SW.

Set a sandstone, 18x15x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Ascend.

55.50 Spur, projects SW.

Descend.

60.00 Hollow, 75 ft. deep, course SW.

Ascend.

77.50 Ridge, bears NW. and SE.

Abrupt descent.

80.00 Set a sandstone, 20x8x6 ins., in a mound of stone, for cor. of secs. 19-20-29 and 30, marked with 2 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

It is impossible to set this cor. in the ground on account of natural obstacles.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

May 31: At this cor. I set off 21°57'N., on decl. arc, and at 11h.57m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 38°48'N.

## SUBDIVISIONS OF T.23 S., R.20 E.

CHADNS	
	S.89°59'E., on a random line, bet. secs. 20 and 29.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.06	Intersect N. and S. line, 9 lks. N. of the cor. of secs. 20-21-28 and 29.
	Thence I run
	N.89°55'W., on a true line,
	Bet. secs. 20 and 29.
	Gradual descent, through dense undergrowth.
16.20	Wash, 50 lks. wide, 5 ft. deep, course SE.
18.00	Begin abrupt ascent over rocky and mountainous land, bearing N. and S.
24.20	Spur, projects SE.
	Abrupt descent.
40.03	Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
	Pits impracticable.
74.10	Hollow, 150 ft. deep, course SE.
	Abrupt ascent.
80.06	The cor. of secs. 19-20-29 and 30.
	Land, mountainous and rolling.
	Soil, rocky, 3rd. and 4th. rate.
	No timber.
	Undergrowth, greasewood.
	Mountainous land or land covered with dense undergrowth on 80.06 chs.
	<hr/>
	N.89°54'W., on a random line, bet. secs. 19 and 30.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.63	Intersect W. bdy. of Tp., 10 lks. N. of the cor. of secs. 19-24-25 and 30, heretofore described.
	Thence I run
	S.89°58'E., on a true line,
	Bet. secs. 19 and 30.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- Gradual descent, through dense undergrowth.
- 7.83 Telephone line, between Moab and Thompsons, bears NW. and SE.
- 17.88 Road, from Moab to Thompsons, bears NW. and SE.
- 40.63 Set a sandstone, 18x12x3 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- 61.00 Hollow, 75 ft. deep, course SE.  
Begin abrupt ascent.
- 75.75 Ridge, bears NW. and SE.  
Abrupt descent.
- 80.63 The cor. of secs. 19-20-29 and 30.  
Land, rolling and mountainous.  
Soil, loam, 1st. and 2nd. rate. rocky, 3rd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 80.63 chs.
- 
- N. 0° 03' W., bet. secs. 19 and 20.  
Descend abruptly over rocky and mountainous land.
- 2.00 Hollow, 100 ft. deep, course SE.  
Ascend.
- 11.00 Spur, projects E.  
Descend.
- 18.50 Hollow, 75 ft. deep, course SE.  
Ascend.
- 40.00 Set a sandstone, 18x12x10 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 42.00 Spur, projects SE.  
Descend.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 45.00 Hollow, 60 ft. deep, course SE.  
Ascend.
- 52.75 Ridge, bears NW. and SE.  
Abrupt descent.
- 57.00 Hollow, 75 ft. deep, course NE.  
Ascend.
- 60.00 Spur, projects E.  
Descend.
- 77.00 Enter hollow, course SE.
- 80.00 Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked with 3 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
Pits impracticable.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
No timber.  
Mountainous land on 80.00 chs.
- 
- S. 89°55'E., on a random line, bet. secs. 17 and 20.
- 40.00 Set temp. ¼ sec. cor.
- 80.04 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 16-17-20 and 21.  
Thence I run  
N. 89°54'W., on a true line,  
Bet. secs. 17 and 20.  
Abrupt descent over solid sandstone, through scattering timber.
- 8.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 11.00 Ridge, bears NE. and SW.  
Abrupt descent.
- 34.00 Hollow, 125 ft. deep, course SW.  
Abrupt ascent.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- 38.00 Sandstone spur, projects S.  
Abrupt descent.
- 40.02 Set a sandstone, 20x14x10 ins. in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, from which  
A pinon, 10 ins. diam., bears S. 78° E., 68 lks. dist., marked  $\frac{1}{4}$  S 20 BT.  
A cedar, 7 ins. diam., bears N. 18° W., 68 lks. dist., marked  $\frac{1}{4}$  S 17 BT.  
On account of natural obstacles, it is impossible to set this cor. in the ground.
- 49.75 Foot of abrupt descent, bears NW. and SE.  
Leave timber.  
Enter hollow, drains SE.
- 80.04 The cor. of secs. 17-18-19 and 20.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.04 chs.  
May 31, 1908.
- June 1 : At 6h. 58m., a.m., l.m.t., I set off 38° 49' N., on lat. arc, 22° 05' N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 17-18-19 and 20.  
Thence I run  
N. 89° 58' W., on a random line, bet. secs. 18 and 19
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.55 Intersect W. bdy. of Tp., 17 lks. N. of the cor. of secs. 13-18-19 and 24, heretofore described.  
Thence I run  
N. 89° 55' E., on a true line,  
Bet. secs. 18 and 19.  
Ascend over rolling land, through dense undergrowth.
- 14.00 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.
- 21.25 Ridge, bears NW. and SE.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- Descend.
- 29.00 Hollow, 75 ft. deep, course SE.  
Abrupt ascent.  
Enter scattering cedar and pinon timber.
- 34.00 Leave timber.
- 40.55 Set a sandstone, 15x14x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 46.60 Spur, projects SW.  
Descend.
- 48.30 Hollow, 75 ft. deep, course SW.  
Abrupt ascent.
- 50.80 Ridge, bears NW. and SE.  
Descend.
- 70.50 Hollow, 100 ft. deep, course SE.  
Abrupt ascent.
- 75.65 Spur, projects SE.  
Abrupt descent.
- 77.50 Enter hollow, course SE.
- 80.55 The cor. of secs. 17-18-19 and 20.  
Land, mountainous, and rolling.  
Soil, sandy, 2nd. and 3rd. rate ; rocky, 3rd. and 4th. rate.  
Timber, cedar and pinon.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 80.55 chs.
- 
- N. 0° 03' W., bet. secs. 17 and 18.
- Ascend over rocky and mountainous land.
- 3.00 Begin abrupt ascent, bears E. and W.
- 5.60 Rocky spur, projects E.  
Abrupt descent.
- 15.50 Foot of abrupt descent, bears NW. and SE.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

- Enter hollow, 150 ft. deep, course SE.
- 36.00 Leave hollow.
- Begin abrupt ascent over sandstone ledges, bearing NW. and SE.
- Enter scattering cedar and pinon timber.
- 40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which
- A pinon, 4 ins. diam., bears S. 89° E., 37 lks. dist., marked  $\frac{1}{4}$  S 17 BT.
- A cedar, 8 ins. diam., bears N. 79° W., 77 lks. dist., marked  $\frac{1}{4}$  S 18 BT.
- 53.00 Sandstone spur, projects SW.
- Descend.
- 59.00 Hollow, 100 ft. deep, course SW.
- Abrupt ascent over solid sandstone.
- 80.00 Set a sandstone, 18x10x7 ins., in a mound of stone, for cor. of secs. 7-8-17 and 18, marked with 4 notches on S. and 5 notches on E. edges, from which
- A pinon, 5 ins. diam., bears N. 85° E., 52 lks. dist., marked T 23 S R 20 E S 8 BT.
- No other trees within limits, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.
- On account of natural obstacles, it is impossible to set this cor. in the ground.
- land, mountainous.
- Soil, rocky, 3rd. and 4th. rate.
- Timber, cedar and pinon.
- Mountainous land on 80.00 chs.
- 
- S. 89° 54' E., on a random line, bet. secs. 8 and 17.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.08 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 8-9-16 and 17.
- Thence I run

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

N.89°55'W., on a true line,  
Bet. secs. 8 and 17.

Descend over rocky and mountainous land, through scattering timber.

3.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.

12.00 Ridge, bears N. and S.  
Abrupt descent over broken land.

34.00 Hollow, 150 ft. deep, course SW.  
Abrupt ascent.

38.70 Sandstone ridge, bears N. and S.  
Abrupt descent.

40.04 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, from which  
A pinon, 15 ins. diam., bears N.21°W., 4 lks. dist., marked  $\frac{1}{4}$  S 8 BT.  
A pinon, 7 ins. diam., bears S.40°30'E., 65 lks. dist., marked  $\frac{1}{4}$  S 17 BT.

41.20 Hollow, 75 ft. deep, course S.  
Abrupt ascent.

46.00 Sandstone ridge, bears NE. and SW.  
Abrupt descent.

65.50 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.

74.00 Sandstone spur, projects S.  
Abrupt descent.

80.08 The cor. of secs. 7-8-17 and 18.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.08 chs.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

S.  $89^{\circ}55'W.$ , on a random line, bet. secs. 7 and 18.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.43 Intersect W. bdy. of Tp., 37 lks. S. of the cor. of secs. 7-12-13 and 18, heretofore described.

Thence I run

S.  $89^{\circ}49'E.$ , on a true line,

Bet. secs. 7 and 18.

Ascend over rocky and mountainous land.

40.43 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

41.75 Begin abrupt ascent over sandstone ledges, through scattering timber, bearing NW. and SE.

80.43 The cor. of secs. 7-8-17 and 18.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon, t

Mountainous land on 80.43 chs.

June 1: At this cor. I set off  $22^{\circ}05' N.$ , on decl. arc, and at 11h. 58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $38^{\circ}50' N.$

N.  $0^{\circ}03' W.$ , bet. secs. 7 and 8.

Ascend abruptly over solid sandstone, through dwarfed cedar and pinon timber.

40.00 Sandstone spur, projects NW.

Point for cor. falls on a sandstone boulder, 4x3x1 ft.

above ground: I cut a cross, (X), at exact point for  $\frac{1}{4}$  sec. cor., mark  $\frac{1}{4}$  on W. side of cross, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Descend.

SUBDIVISIONS OF T.23 S., R.20 E.

CHAINS

- 47.50 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 58.75 Spur, projects NW.  
Abrupt descent.
- 67.00 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 71.00 Rocky spur, projects SW.  
Abrupt descent.
- 74.00 Hollow, 75 ft. deep, course SW.  
Ascend over solid sandstone.
- 80.00 Point for cor. falls on the smooth sandstone ledge, I cut a cross, (X), at exact point for cor. of secs. 5-6-7 and 8, mark 5 grooves on S. and E. sides of cross, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
Pits impracticable.  
No suitable bearing trees are within limits.  
Land mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, dwarfed cedar and pinon.  
Mountainous land on 80.00 chs.
- 
- S. 89° 55' E., on a random line, bet. secs. 5 and 8.
- 40.00 Set temp. ¼ sec. cor.
- 80.02 Intersect N. and S. line, 3 lks. S. of the cor. of secs. 4-5-8 and 9.  
Thence I run  
N. 89° 56' W., on a true line,  
Bet. secs. 5 and 8.  
Ascend over rolling land.
- 28.50 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.
- 40.01 Falls on a sandstone boulder, 4x3x2 ft. above ground, I cut a cross, (X), at exact point for ¼ sec. cor., mark ¼ on N. side of cross, and raise a mound of stone, 2 ft. base, 1½ ft.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

high, N. of cor.

Pits impracticable.

51.35 Sandstone ridge, bears NW. and SE.

Descend over broken sandstone ledges.

Enter scattering dwarfed timber.

66.00 Enter solid sandstone.

80.02 The cor. of secs. 5-6-7 and 8.

Land, rolling and mountainous.

Soil, loan, 1st. and 2nd. rate; rocky, 3rd. and 4th. rate.

Timber, dwarfed, cedar and pinon.

Mountainous land on 51.52 chs.

---

N. 89° 49' W., on a random line, bet. secs. 6 and 7.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.38 Intersect W. bdy. of Tp., 10 lks. S. of the cor. of secs. 1-6-7 and 12, heretofore described.

Thence I run

S. 89° 45' E., on a true line,

Bet. secs. 6 and 7.

Descend over rocky and mountainous land.

4.10 Hollow, 75 ft. deep, course SW.

Ascend.

21.00 Ridge, bears NE. and SW.

Descend.

26.25 Hollow, 100 ft. deep, course SW.

Ascend.

38.50 Ridge, bears NE. and SW.

Descend over solid sandstone.

40.38 Falls on the smooth sandstone ledge, I cut a cross, (X), at exact point for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. side of cross, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

42.25 Hollow, 75 ft. deep, course SW.

## SUBDIVISIONS OF T.23 S., R.20 E.

## CHAINS

Abrupt ascent.

Enter scattering dwarfed timber.

63.75 Sandstone spur, projects SE.

Abrupt descent.

68.00 Hollow, 100 ft. deep, course S.

Abrupt ascent over solid sandstone.

80.38 The cor. of secs. 5-6-7 and 8.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, dwarfed cedar and pinon.

Mountainous land on 80.38 chs.

---

N.0°03'W., on a random line, bet. secs. 5 and 6.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

83.10 Intersect N. bdy. of Tp., 10 lks. W. of the cor. of secs. 5-6-31 and 32, heretofore described.

Thence I run

S.0°01'W., on a true line,

Bet. secs. 5 and 6.

Gradual ascent over rolling land.

20.50 Begin abrupt ascent over sandstone ledges, bearing NW. and SE.

Enter scattering dwarfed timber.

39.40 Rocky ridge, bears NW. and SE.

Descend.

43.10 Set a sandstone, 15x12x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

There are no suitable bearing trees within limits.

58.00 Enter solid sandstone.

70.30 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

SUBDIVISIONS OF T.23 S., R.20 E.

<p>CHAINS</p> <p>73.25</p> <p>80.00</p> <p>83.10</p> <p><i>62.60</i></p> <p><i>30-50</i></p>	<p>Spur, projects SW.</p> <p>Abrupt descent.</p> <p>Enter solid sandstone.</p> <p>The cor. of secs. 5-6-7 and 8.</p> <p>Land, rolling and mountainous.</p> <p>Soil, loam, 1st. rate: rocky, 3rd. and 4th. rate.</p> <p>Timber, dwarfed, cedar and pinon.</p> <p>Mountainous land on 62.60 chs.</p> <p style="text-align: right;">June 1, 1908.</p>
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GENERAL DESCRIPTION.

This township is mountainous throughout, with the exception of a valley which cuts diagonally through it north of the centre.

The soil of the mountainous portion is generally sandstone ledges, covered with a scattering growth of dwarfed cedar and pinon timber, while the soil of the valley mentioned above is sandy loam and capable of producing crops with irrigation.

There are no settlers or indications of any surface water in this township.

There is no mineral found in this township.

*Lawrence D. Giffert*

U. S. Deputy Surveyor

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,

Harvey D. Heist,, United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of Subdivisions  
of Ts. 22 and 23 S., Rs. 18, 19 and 20 E., S.L.B. & M., in the state of Utah.

showing the respective capacities in which they acted:

Manderson W. Houghton,....., *Chainman.*

Walter A. Stumm,....., *Chainman.*

Earl Woolley,....., *Moundman.*

Homer Petty,....., *Moundman.*

Claude L. Heist,....., *Arman.*

....., *Arman.*

Charlie Stumm,....., *Flagman.*

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

....., United States Deputy Surveyor, in surveying all

those parts or portions of the Subdivisions of Ts. 22 and 23 S., Rs. 18, 19 and 20

E.,.....

..... of the Salt Lake

Base and..... meridian, in the state of Utah....., which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey  
has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the  
corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah.....

Manderson W. Houghton....., *Chainman.*

Walter A. Stumm....., *Chainman.*

Earl Woolley....., *Moundman.*

Homer Petty....., *Moundman.*

Claude L. Heist....., *Arman.*

....., *Arman.*

Charlie Stumm....., *Flagman.*

Subscribed and sworn to before me this 1st...... }

day of June....., 1908

Harvey D. Heist

U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 21st. day of March, 1907, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Subdivisions of T8.22 and 23 S., R8.18, 19 and 20, E.

Base and Meridian in the state of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

*Harvey D. Heist*  
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me this 30th day of September, 1908.

*Thomas Hull*  
U.S. Surveyor-General  
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1908

The foregoing field notes of the survey of the subdivisional lines of Township No. 23 South, Range No. 20 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood under their contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in the file has been correctly copied from the original notes on file in this office.

United States Surveyor General

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4-679.

UNITED STATES GEOLOGICAL SURVEY

" M "

BOOK A-349

# FIELD NOTES

RE  
OF THE SURVEY OF THE

FILED  
OCT 12 1908

THIRD STANDARD PARALLEL SOUTH

through

Range No. 12 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors,

Under <sup>their</sup> ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced June 3, 1908

Survey completed June 4, 1908

6-161

high 4-70-54  
low 1-11-00

NAMES AND DUTIES OF ASSISTANTS.

Earl Woolley, Chairman

Manderson W. Houghton "

Homer Petty, "

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

BOOK A-349

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Earl Woolley, Manderson W. Houghton, Homer Petty, & Walter A. Stumm, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the Third Stan. Par. S., through R. 12 E., S. L. B. & M., in the state of Utah.

Earl Woolley, Manderson W. Houghton, Chainman  
Homer Petty, Walter A. Stumm, Chainman

Subscribed and sworn to before me this 3rd. day of June, 1908



J. J. Foust, U.S. Deputy Surveyor

WE, Earl Woolley and Homer Petty, do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the Third Stan. Par. S., through R. 12 E., S. L. B. & M., in the state of Utah.

Earl Woolley, Moundman  
Homer Petty, Moundman

Subscribed and sworn to before me this 3rd. day of June, 1908



J. J. Foust, U.S. Deputy Surveyor

WE, I, Claude L. Heist, do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of the Third Stan. Par. S., through R. 12 E., S. L. B. & M., in the state of Utah.

Claude L. Heist, Axman

Subscribed and sworn to before me this 3rd. day of June, 1908



J. J. Foust, U. S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the resurvey of the Third Stan. Par. S., through R. 12 E., S. L. B. & M., in the state of Utah.

Charlie Stumm, Flagman

Subscribed and sworn to before me this 3rd. day of June, 1908



J. J. Foust, U.S. Deputy Surveyor

## RESURVEY OF THE

THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

Survey commenced June 3, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors, then to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the Standard cor. of Tps. 15 S., Rs. 12 and 13 E., which is a sandstone, 10x8x4 ins. above ground, marked and witnessed as described by the surveyor general, in approximate latitude  $39^{\circ}28'N.$ , longitude  $110^{\circ}33'W.$ , I set off  $39^{\circ}28'N.$ , on lat. arc,  $22^{\circ}22'N.$ , on decl. arc, and at 3h.58m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

June 3, 1908.

June 4 : At 2h.37m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 6h.30m., a.m., I lay off the azimuth of Polaris,  $1^{\circ}32'$  to the west and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. east of the mark determined by the solar.

At 6h.58m., a.m., l.m.t., I set off  $39^{\circ}28'N.$ , on lat. arc,  $22^{\circ}27'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross, on the stone already set 5 chs. N. of my station; this mark falls 0.5 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about

RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

CHAINS

0'26" west and east of the meridian established by the Polaris observations; therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h.30m., a.m. is N.16°39'W., the angle thus determined gives the mag. decl.16°39'E.

From the standard cor.already described, I retrace West, along the S.bdy.of sec.36, and at 40.16 fall 14 lks. S.of the Stan.¼ sec.cor.and at 80.23 fall 26 lks.N. of the stan.cor.of secs.35 and 36, as my bearing and chainin does not agree with the original field notes and there being no subdivisions depending on this line, I resurvey this line as follows:

I begin at the stan.cor.of Tps.15 S.,Rs.12 and 13,E.and run

West, on S.bdy.of sec.36.

Gradual ascent over gravelly bench.

2.10 No trace of C.C.of T.16 S.,Rs.12 and 13 E. could be found. Difference between measurement of 40.00 chs.by two sets of chainmen is 4 lks., position of middle point

By 1st.set,40.02 chs.,

By 2nd.set,39.98 chs., the mean of which is

40.00 Set a sandstone,15x12x3 ins.,10 ins.in the ground, for re-established standard ¼ sec.cor.,marked SC¼ on N.face, dig pits,18x18x12 ins.,E.and W.of stone,3 ft.dist.,and raise a mound of earth,3½ ft.base,1½ ft.high,N.of cor. The original stan.¼ sec.cor.bears N.48°50'W.,21 lks. dist.,I destroy all traces of it.

40.05 Ridge,bears NW.and SE.

Descend.

54.25 Hollow,50 ft.deep,course SW.

Ascend.

58.00 Spur,projects S.

Descend.

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

62.25 Hollow, 100 ft. deep, course S.

Abrupt ascent.

69.00 Spur, projects SE.

Descend.

73.00 Hollow, 50 ft. deep, course SE.

Ascend.

Difference between measurement of 80.00 chs., by two sets of chainmen is 4 lks., position of middle point

By 1st. set, 80.02 chs.,

By 2nd. set, 79.98 chs., the mean of which is

80.00 Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for re-established standard cor. of secs. 35 and 36, marked SC on N., with 1 groove on E. and 5 grooves on W. faces, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.

The original stan. sec. cor. bears S. 41° 30' W., 55 lks. dist., I. destroy all traces of this cor.

Land, rolling and mountainous.

Soil, gravelly, 3rd. rate.

No timber.

Mountainous land on 40.00 chs.

West, on S. bdy. of sec. 35.

Ascend over mountainous land.

11.25 Ridge, bears NW. and SE.

Descend.

16.00 Hollow, 50 ft. deep, course SE.

Ascend.

24.50 Spur, projects SE.

Descend.

28.00 Hollow, 60 ft. deep, course SE.

Abrupt ascent.

39.00 Ridge, bears NW. and SE.

Abrupt descent.

## RESURVEY OF THE

THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

Difference between measurement of 40.00 chs. by two sets of chainmen is 6 lks., position of middle point

By 1st. set, 40.03 chs.,

By 2nd. set, 39.97 chs., the mean of which is

40.00 Set a Sandstone, 18x12x4 ins., 12 ins. in the ground, for re-established standard  $\frac{1}{4}$  sec. cor., marked SC $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

The original stan.  $\frac{1}{4}$  sec. cor. bears S. 46° 10' W., 64 lks. dist.,

I destroy all traces of original  $\frac{1}{4}$  sec. cor.

48.25 Perpendicular sandstone ledge, 20 ft. high, bears N. and S. Abrupt descent.

51.00 Enter bottom of hollow, 150 ft. deep, course S.

52.90 Wash, 10 lks. wide, 5 ft. deep, course S.

55.85 Wash, 15 lks. wide, 8 ft. deep, course SE.

61.00 Leave hollow, begin abrupt ascent, bears N. and S.

68.30 Top of abrupt ascent, bears NE. and SW.

Over rocky bench.

73.00 Leave bench, bears NE. and SW.

Descend along steep rocky north slope.

Difference between measurement of 80.00 chs. by two sets of chainmen is 8 lks., position of middle point

By 1st. set, 80.04 chs.,

By 2nd. set, 79.96 chs., the mean of which is

80.00 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for re-established standard cor. to secs. 34 and 35, marked SC on N. with 2 grooves on E. and 4 grooves on W. faces, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

The original stan. sec. cor. bears S. 67° 23' W., 101 lks.

dist., I destroy all traces of original cor.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

No timber.

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

Mountainous land on 80.00 chs.

June 4: At this cor. I set off  $22^{\circ}28'N.$ , on decl. arc, and at 11h.58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $39^{\circ}28'N.$

West, on S. bdy. of sec. 34.

Over mountainous land, descend along steep rocky north slope.

3.00 Hollow, 75 ft. deep, course N.

Abrupt ascent.

6.00 Spur, projects NW.

Abrupt descent.

10.50 Hollow, 60 ft. deep, course NW.

Ascend.

13.00 Spur, projects N.

Abrupt descent.

22.50 Road, from Mounds to Sunnyside, bears NE. and SW., in mouth of hollow, from NE.

24.75 Enter level sandy land, and dense undergrowth.

29.75 East bank of Cottonwood Wash, 25 ft. deep, course SE.

31.80 West bank of wash.

Difference between measurement of 40.00 chs., by two sets of chainmen is 6 lks., position of middle point

By 1st. set, 39.97 chs.,

By 2nd. set, 40.03 chs., the mean of which is

40.00 Set a sandstone, 15x10x4 ins., 10 ins. in the ground, for re-established standard  $\frac{1}{4}$  sec. cor., marked  $SC\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.

After diligent search, no trace can be found of the original stan.  $\frac{1}{4}$  sec. cor.

68.90 Telephone line, between Price and Sunnyside, bears NE. and SW.

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

- 78.43 Telegraph line, bears N.  $10^{\circ}05'$  E. and S.  $10^{\circ}05'$  W.
- 78.95 Middle of track of Sunnyside branch of the Denver and Rio Grande Railroad, bears N.  $10^{\circ}05'$  E., and S.  $10^{\circ}05'$  W.
- 79.50 Begin abrupt ascent, bears N. and S.  
Difference between measurement of 80.00 chs., by two sets of chainmen is 4 lks., position of middle point  
By 1st. set, 80.02 chs.,  
By 2nd. set, 79.98 chs., the mean of which is
- 80.00 Set a sandstone, 24x8x6 ins., 18 ins. in the ground, for re-established standard cor. of secs. 33 and 34, marked SC on N., with 3 grooves on E. and W. faces, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.  
From the cor. the 2 Mile Post, on the Sunnyside branch of the D. & R. G. R. R., bears N.  $42^{\circ}30'$  E., 1.43 chs. dist.  
The original stan. cor. bears S.  $26^{\circ}20'$  W., 1.61 chs. dist.,  
I destroy all traces of original stan cor.  
Land, mountainous, and level.  
Soil, rocky, 3rd. rate ; sandy, 2nd. rate.  
No timber.  
Undergrowth, greasewood.  
Land covered with dense undergrowth or mountainous land on 80.00 chs.
- West, on S. bdy. of sec. 33.
- Ascend abruptly over rocky and mountainous land.
- 3.00 Spur, projects N.  
Abrupt descent.
- 8.00 Enter hollow, 150 ft. deep, course NE.
- 20.00 Leave hollow, begin abrupt ascent, bears NE. and SW.
- 35.70 Ridge, bears NE. and SW.  
Descend.
- 36.50 Head of hollow, course N.  
Ascend.

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

- 38.00 Spur, projects N.  
Descend.
- 39.50 Head of hollow, course N.  
Ascend.  
Difference between measurement of 40.00 chs., by two sets of chainmen is 8 lks. position of middle point  
By 1st. set, 39.96 chs.,  
By 2nd. set, 40.04 chs., the mean on which
- 40.00 Set a sandstone, 24x12x4 ins., 18 ins. in the ground, for re-established standard  $\frac{1}{4}$  sec. cor., marked SC  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. Pits impracticable.  
The original stan.  $\frac{1}{4}$  sec. cor., bears S. 41 $^{\circ}$  W., 1.51 chs. dist., I destroy all traces of the original stan.  $\frac{1}{4}$  sec. cor.
- 40.50 Ridge, bears N. and S,  
Descend.
- 42.75 Hollow, 50 ft. deep, course N.  
Ascend.
- 45.00 Spur, projects N.  
Descend.
- 46.75 Hollow, 50 ft. deep, course N.  
Abrupt ascent.
- 49.00 Spur, projects N.  
Abrupt descent.
- 54.00 Hollow, 100 ft. deep, course NE.  
Abrupt ascent.  
Difference between measurement of 80.00 chs., by two sets of chainmen is 6 lks., position of middle point  
By 1st. set, 79.97 chs.,  
By 2nd. set, 80.03 chs., the mean of which is
- 80.00 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for re-established standard cor. of secs. 32 and 33, marked SC on N., with 4 grooves on E. and 2 grooves on W. faces,

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.  
Pits impracticable.

The original stan. cor. bears S. 37° 10' W., 1.91 chs. dist.,  
I destroy all traces of original stan. cor.

Land, mountainous.

Soil, rocky, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

---

West, on S. bdy. of sec. 32.

Ascend over rocky and mountainous land.

1.50 Ridge, bears N. and S.

Descend.

9.00 Hollow, 100 ft. deep, course N.

Ascend.

16.00 Ridge, bears NE. and SW.

Descend.

35.00 Hollow, 75 ft. deep, course NE.

Ascend.

Difference between measurement of 40.00 chs. by two sets  
of chainmen is 8 lks., position of middle point

By 1st. set, 40.04 chs.,

By 2nd. set, 39.96 chs., the mean of which is

40.00 Set a sandstone, 18x13x4 ins., 12 ins. in the ground, for  
re-established standard  $\frac{1}{4}$  sec. cor., marked SC $\frac{1}{4}$  on N. face,  
and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.  
Pits impracticable.

No trace can be found of the original stan.  $\frac{1}{4}$  sec. cor.

55.00 Spur, projects N.

Descend.

59.00 Hollow, 50 ft. deep, course N.

Ascend.

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

- 63.50 Ridge, bears NW. and SE.  
Descend.
- 64.00 Begin abrupt descent, bears NW. and SE.
- 71.00 Foot of abrupt descent, bears NW. and SE.  
Descend over broken land.  
Difference between measurement of 80.00 chs., by two sets of chainmen is 10 lks., position of middle point  
By 1st. set, 80.05 chs.,  
By 2nd. set, 79.95 chs., the mean of which is
- 80.00 Set a sandstone, 20x6x6 ins., 15 ins. in the ground, for re-established standard cor. of secs. 31 and 32, marked SC on N., with 5 grooves on E. and 1 groove on W. faces, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor. Pits impracticable.  
The original stan. cor., bears S. 26° 33' W., 2.76 chs., dist.,  
I destroy all traces of the original cor.  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
No timber.  
Mountainous land on 80.00 chs.  

---

West, on S. bdy. of sec. 31.  
Descend over rocky and mountainous land.
- 5.00 Hollow, 100 ft. deep, course S.  
Abrupt ascent.
- 10.00 Spur, projects S.  
Descend over rolling land.
- 22.00 Telephone line, between Price and Sunnyside, bears NW. and SE.
- 27.75 Road, from Price to Mounds, bears NW. and SE.
- 28.20 Telegraph line, bears N. 46° 51' W. and S. 46° 51' E.
- 29.24 Middle of track of main line of the Denver and Rio Grande railroad, bears N. 46° 51' W., and S. 46° 51' E.  
Gradual descent.

## RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

## CHAINS

Difference between measurement of of 40.00 chs., by two sets of chainmen is 4 lks., position of middle point

By 1st. set, 39.98 chs.

By 2nd. set, 40.02 chs., the mean of which is 40.00

40.00 Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for re-established standard  $\frac{1}{4}$  sec. cor., marked SC  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor. No trace can be found of the original stan.  $\frac{1}{4}$  sec. cor.

51.00 Wash, 60 lks. wide, 15 ft. deep, course SW.

54.00 Enter wash, 20 ft. deep, course SW.

56.75 Leave wash, course SW.

62.25 Wash, 50 lks. wide, 8 ft. deep, course SW.

80.00 Wash, 1.00 ch. wide, 10 ft. deep, course SW.

Difference between measurement of two sets of chainmen to the intersection with the east bdy. of T. 15 S., R. 11 E., is 6 lks., position of intersection

By 1st. set, 81.57 chs.,

By 2nd. set, 81.51 chs., the mean of which is 81.54

30.54  
51.00  
81.54 Intersect E. bdy. of T. 15 S., R. 11 E., 3.06 chs., N. of the standard cor. of T. 15 S., R. 11 and 12 E., which is a cottonwood stake, 2 ins. sq., 18 ins. above ground, marked and witnessed as described by the surveyor general.

Set a sandstone, 15x7x7 ins., 10 ins. in the ground, for Stan. closing cor. to T. 15 S., R. 12 E., marked SC 15 S. on N., CC 12 E on E., and with 6 grooves on N. and E. faces, dig pits, 30x24x12 ins., N. of stone 4 ft. and E. of stone, 8 ft. dist., and raise a mound of earth, 5 ft. base, 2 $\frac{1}{2}$  ft. high, E. of cor.

I destroy all markings on the standard cor. of T. 15 S., R. 11 and 12 E., that pertain to R. 12 E.

Land mountainous and cut by washes.

Soil, rocky, 3rd. rate; loam, 1st. rate.

RESURVEY OF THE THIRD STANDARD PARALLEL SOUTH, through RANGE 12 E.

CHAINS

No timber.

Mountainous land on 30.54 chs.

June 4, 1908

For general description, see subdivisions of T.15 S., R.  
12 E.

  
U. S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist

United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of the Third Stan.

Par. S., through R. 12 E., S. 1. B. & M., in the state of Utah.

showing the respective capacities in which they acted:

Earl Woolley, Manderson W. Houghton, Chairman.

Homer Petty, Walter A. Stumm, Chairman.

Earl Woolley, Moundman.

Homer Petty, Moundman.

Claude L. Heist, Axman.

Axman.

Charlie Stumm, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in surveying all

those parts or portions of the Third Standard Par. South, through R. 12 E.,

of the Salt Lake

Base and meridian, in the state of Utah, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

Earl Woolley, Manderson W. Houghton, Chairman.

Homer Petty, Walter A. Stumm, Chairman.

Earl Woolley, Moundman.

Homer Petty, Moundman.

Claude L. Heist, Axman.

Axman.

Charlie Stumm, Flagman.

Subscribed and sworn to before me this 4th.

day of June, 1908



Harvey D. Heist

U.S. Deputy Surveyor

FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 21st. day of March, 1907, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the Third Standard Parallel South, through Range 12 East,

of the Salt Lake Base and \_\_\_\_\_ meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

*Harvey D. Heist*  
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me on this 12th day of October, 1908.

*Thomas Hull*

U.S. Surveyor-General  
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1908

The foregoing field notes of the survey of the Third Standard Parallel South, through Range No. 12 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood under <sup>their</sup> contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and <sup>the</sup> surveys they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-349

FILED  
OCT 14 1908

FIELD NOTES

RE  
OF THE SURVEY OF THE

EAST AND NORTH BOUNDARIES

of

Township No. 15 South,

Range No. 12 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job. H. Winwood, United States Deputy Surveyor, s

Under their Contract No. 298, dated March 21, 1907

Survey commenced June 7, 1908

Survey completed June 7, 1908

6-161

high 4-72-57  
low 1-10-00

## NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chairman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

BOOK A-349

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PRELIMINARY OATHS OF ASSISTANTS.

WE, Manderson W. Houghton and Walter A. Stumm, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of the North Boundary of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah

Manderson W. Houghton Chainman  
Walter A. Stumm Chainman

Subscribed and sworn to before me this 5th. day of June, 1908



Jarvis H. Gunt  
U. S. Deputy Surveyor

WE, Earl Wolley and Homer Petty do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of the North Boundary of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah

Earl Wolley Moundman  
Homer Petty Moundman

Subscribed and sworn to before me this 5th. day of June, 1908



Jarvis H. Gunt  
U. S. Deputy Surveyor

WE, I. Claude L. Heist do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given me, to the best of our skill and ability, in the survey of the North Boundary of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah.

Claude L. Heist Axman

Subscribed and sworn to before me this 5th. day of June, 1908



Jarvis H. Gunt  
U. S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of the N. Boundary of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah.

Charlie Stumm Flagman

Subscribed and sworn to before me this 5th. day of June, 1908



Jarvis H. Gunt  
U. S. Deputy Surveyor

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

Survey commenced June 7, 1908, and executed with the instrument described in book "A", of this survey.

I know from recent observations made June 5 and 6, 1908, at the standard corner of Tps.15 S., Rs.12 and 13 E., that the instrument is in adjustment.

I begin at the cor. of Tps.14 and 15 S., Rs.12 and 13 E., heretofore described.

At 6h. 59m., a.m., l.m.t., I set off  $39^{\circ}33'N.$ , on lat. arc,  $22^{\circ}47'N.$ , on decl. arc, and determine a meridian with the solar,

Thence I run

$S.89^{\circ}59'W.$ , on a retracement line between sections 1 and 36, at 40.00 chs. no trace can be found of the original  $\frac{1}{4}$  sec. cor. and at 80.00 chs., no trace can be found of the cor. of secs. 1-2-35 and 36, I continue the line  $S.89^{\circ}59'W.$ , and find many of the cors. missing and the balance of the cors. out of limits for course and distance, and at 482.59 chs., intersect the E. boundary of T.15 S., R.11 E., 85 lks. S. of the cor. of Tps.14 and 15 S., Rs.11 and 12 E., which is a sandstone boulder, 36 x 36 x 24 ins. above ground, marked and witnessed as described by the surveyor general.

As the N. boundary of T.15 S., R.12 E., is out of limits for course and distance and many corners are missing, there being no subdivisions depending on it, I resurvey the line.

The falling of my retracement line answers to a correction of  $0^{\circ}06'$ , or 14 lks. N. per mile, counting from the NE. cor., of the Tp., on my retracement line, which I now consider as a random line:

therefore I run

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

S.89°55'E., resurveying bet. secs. 6 and 31.

Ascend over mountainous land.

2.00 Spur, projects NW.

Descend.

5.00 Hollow, 150 ft. deep, course NW.

Abrupt ascent.

13.50 Ridge, bears NW. and SE.

Abrupt descent.

Enter scattering timber.

21.60 Foot of abrupt descent, bears NW. and SE.

Descend.

32.60 Hollow, 125 ft. deep, course NW.

Abrupt ascent.

36.10 Ridge, bears NW. and SE.

Descend.

42.59 Set a sandstone, 22 x 10 x 9 ins., 16 ins. in the ground, for re-established  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

The original  $\frac{1}{4}$  sec. cor., bears N. 86° 10' W., 3.29 chs. dist.

I destroy all traces of the original  $\frac{1}{4}$  sec. cor.

60.10 Wash, 50 lks. wide, 12 ft. deep, in hollow, 60 ft. deep, course NE.

Leave timber.

Ascend.

66.60 Spur, projects NE.

Descend.

76.35 Hollow, 50 ft. deep, course NE.

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

Ascend.

82.59 Set a sandstone, 15 x 8 x 6 ins., 10 ins. in the ground, for re-established cor. of secs. 5-6-31 and 32, marked with 5 notches on E. and 1 notch on W. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

The original sec. cor. bears N. 87° 30' W., 3.12 chs. dist.

I destroy all traces of original sec. cor.

Land mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, cedar and pinon.

Mountainous land on 82.59 chs.

June 7 : At this cor. I set off 22° 47' N., on decl. arc, and at 11h. 59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 33' N.

---

S. 89° 55' E., resurveying bet. secs. 5 and 32.

Ascend over rolling land, through dense undergrowth.

16.00 Ridge, bears NE. and SW.

Descend.

36.70 Hollow, 50 ft. deep, course S.

Ascend.

40.00 Set a sandstone, 18 x 8 x 5 ins., 12 ins. in the ground, for re-established ¼ sec. cor., marked ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.

Pits impracticable.

The original ¼ sec. cor. bears N. 88° 10' W., 2.91 chs. dist.

I destroy all traces of original ¼ sec. cor.

41.00 Spur, projects SE.

Descend.

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- 50.00 Hollow, 50 ft. deep, course SE.  
Ascend.
- 58.00 Spur, projects S.  
Descend.
- 69.50 Wash, 30 lks. wide, 10 ft. deep, course SE.  
Over level land.
- 80.00 Set a sandstone, 20 x 6 x 4 ins., 15 ins. in the ground, for re-established cor. of secs. 4-5-32 and 33, marked with 4 notches on E. and 2 notches on W. edges, dig pits, 18 x 18 x 12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
The original sec. cor. bears N. 89° 00' W., 2.77 chs. dist.  
I destroy all traces of the original sec. cor.  
Land rolling.  
Soil, loam, 1st. and 2nd. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 80.00 chs.
- 
- S. 89° 55' E., resurveying bet. secs. 4 and 33.  
Over level land, through dense undergrowth.
- 10.00 Wash, 2.00 chs. wide, 10 ft. deep, course SE.
- 40.00 Set a sandstone, 16 x 10 x 6 ins., 11 ins. in the ground, for re-established  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18 x 18 x 12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.  
No trace can be found of the original  $\frac{1}{4}$  sec. cor.
- 59.50 Road bears NE. and SW.  
Gradual ascent.

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- 76.50 Ridge, bears NE. and SW.  
Descend.
- 80.00 Set a sandstone, 16 x 8 x 5 ins., 11 ins. in the ground, for re-established cor. of secs. 3-4-33 and 34, marked with 3 notches on E. and W. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
The original sec. cor. bears N.  $89^{\circ}30'W.$ , 1.89 chs. dist.  
I destroy all traces of the original sec. cor.  
Land level and rolling.  
Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 80.00 chs.
- 
- S.  $89^{\circ}55'E.$ , resurveying bet. secs. 3 and 34.  
Gradual descent through dense undergrowth.
- 25.25 Hollow, 50 ft. deep, course S.  
Ascend.
- 40.00 Spur, projects SW.  
Set a sandstone, 18 x 6 x 4 ins., 12 ins. in the ground, for re-established  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.  
The original  $\frac{1}{4}$  sec. cor. bears west, 1.45 chs. dist.  
I destroy all traces of original  $\frac{1}{4}$  sec. cor.  
Descend.
- 45.00 Hollow, 50 ft. deep, course SW.  
Ascend.
- 58.00 Ridge, bears NE. and SW.  
Descend.

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- 78.75 Wash, 25 lks. wide, 12 ft. deep, course S.  
Gradual ascent.
- 80.00 Set a sandstone, 16x8x6 ins., 11 ins. in the ground, for re-established cor. of secs. 2-3-34 and 35, marked with 2 notches on E. and 4 notches on W. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor.  
Pits impracticable.  
No trace can be found of the original sec. cor.  
Land rolling.  
Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 80.00 chs.
- 
- S. 89° 55' E., resurveying bet. secs. 2 and 35.  
Ascend gradually over rolling land, through dense undergrowth.
- 6.00 Wash, 50 lks. wide, 15 ft. deep, course SW.
- 40.00 Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for re-established ¼ sec. cor., marked ¼ on N. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, N. of cor.  
Pits impracticable.  
The original ¼ sec. cor. bears S. 87° 30' W., 83 lks. dist.  
I destroy all traces of original ¼ sec. cor.
- 50.00 Leave dense undergrowth.
- 60.50 Road, bears NE. and SW.
- 80.00 Set a sandstone, 18x14x5 ins., 12 ins. in the ground, for re-established cor. of secs. 1-2-35 and 36, marked with 1 notch on E. and 5 notches on W. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
No trace can be found of the original sec. cor.  
Land rolling.  
Soil, loam, 1st. rate.

## RESURVEY OF THE NORTH BOUNDARY OF T.15 S., R.12 E.

## CHAINS

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 50.00 chs.

S.89°55'E., resurveying bet. secs. 1 and 36.

Ascend over rolling land.

20.00 Road, bears NW. and SE.

40.00 Set a cedar post, 3 ft. long, 4 ins. sq., with marked stone, 24 ins. in the ground, for re-established  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  S 36 on N., and 1 on S. face, dig pits, 18x18x12 ins. E. and W. of post, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

No trace can be found of the original  $\frac{1}{4}$  sec. cor.

53.00 Begin descent.

56.25 Wash, 20 lks. wide, 6 ft. deep, course SE.

Ascend.

60.00 Begin ascent over rocky and mountainous land, bears NW. and SE.

64.00 Road, bears NE. and SW.

80.00 The cor. of Tps. 14 and 15 S., Rs. 12 and 13 E.,  
Land, rolling and mountainous.

Soil, loam, 1st. rate; rocky, 3rd. rate.

No timber.

Mountainous land on 20.00 chs.

June 7, 1908

For General Description, see Subdivisions of T.15 S., R.12 E.

For table of latitudes and departures, see retracement of the E. and W. bdys. of T.15 S., R.12 E.

*James H. Geist*  
U. S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES:

A list of the names of the individuals employed by Harvey D. Heist,

United States Deputy Surveyor, to assist in running, measuring, and

marking the lines and corners described in the foregoing field notes of the survey of the North and East Boundaries of T. 15 S., R. 12 E.,

showing the respective capacities in which they acted:

Manderson W. Houghton, Chairman.

Walter A. Stumm, Chairman.

Earl Woolley, Moundman.

Homer Petty, Moundman.

Claude L. Heist, Axman.

Axman.

Charlie Stumm, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in surveying all

those parts or portions of the North and East Boundaries of T. 15 S., R. 12 E.

of the Salt Lake

Base and meridian, in the state of Utah, which are represented

in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor

General for Utah

Manderson W. Houghton, Chairman.

Walter A. Stumm, Chairman.

Earl Woolley, Moundman.

Homer Petty, Moundman.

Claude L. Heist, Axman.

Axman.

Charlie Stumm, Flagman.

Subscribed and sworn to before me this 7th day of June, 1908

Harvey D. Heist, U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of 21st day of March, 1907, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of the North Boundary of T. 15 S., R. 12 E.,

of the Salt Lake Base and meridian, in the state of Utah, which are represented in foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

Harvey D. Heist
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me, this 12th day of October, 1908.

Thomas Hull
U.S. Surveyor-General
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1908

The foregoing field notes of the survey of the North Boundary of Township No. 15 South, Range No. 12 East of the Salt Lake Base and Meridian, Utah,

executed by Harvey D. Heist and Job H. Winwood under their contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

Thomas Hull
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-349

FILED

OCT 12 1908

*[Handwritten signature]*

# FIELD NOTES

RETRACEMENT  
OF THE SURVEY OF THE

EAST and WEST BOUNDARIES

of

Township No. 15 South,

Range No. 12 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

Under <sup>their</sup> ~~his~~ Contract No. 298, dated March 21, 1907

Retracement Survey commenced June 5, 1908

Retracement Survey completed June 8, 1908

*Retr. E. R. Day 5-79-0*  
*" W. R. Day 6-03-81*

## NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chainman

Walter A. Stumm, "

Earl Woolley, Moundman

Claude L. Heist, Axman

Charlie Stumm, Flagman

BOOK A-349

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Manderson W. Houghton and Walter A. Stumm,  
do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the  
chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that  
we will report the true distances to all notable objects, and the true lengths of all lines that we assist in  
measuring, to the best of our skill and ability, and in accordance with instructions given us, in the <sup>retracement</sup> survey of  
E. & W. bdy. of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah

Manderson W. Houghton, Chainman  
Walter A. Stumm, Chainman

Subscribed and sworn to before me this 8th  
day of June, 1908



Fawcett D. First  
U. S. Deputy Surveyor

We, I, Earl Woolley and  
do solemnly swear that I will well and truly perform the duties of moundmen in the establishment  
of corners, according to the instructions given me, to the best of my skill and ability, in the <sup>retracement</sup> survey of  
E. & W. bdy. of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah

Earl Woolley, Moundman  
Earl Woolley, Moundman

Subscribed and sworn to before me this 8th  
day of June, 1908



Fawcett D. First  
U. S. Deputy Surveyor

We, I, Claude L'Heist and  
do solemnly swear that I will well and truly perform the duties of axmen in the establishment of corners  
and other duties, according to instructions given us, to the best of my skill and ability, in the <sup>retracement</sup> survey of  
E. & W. bdy. of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah

Claude L. Heist, Axman  
Claude L. Heist, Axman

Subscribed and sworn to before me this 8th  
day of June, 1908



Fawcett D. First  
U. S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and truly  
perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the  
<sup>retracement</sup> of E. & W. bdy. of T. 15 S., R. 12 E., S. L. B. & M., in the state of  
Utah.

Charlie Stumm, Flagman

Subscribed and sworn to before me this 8th  
day of June, 1908



Fawcett D. First  
U. S. Deputy Surveyor

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

Survey commenced, June 5, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors; then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the Stan. Cor. of Tps. 15 S., Rs. 12 and 13 E., heretofore, described, in approximate latitude  $39^{\circ}28'N.$ , longitude  $110^{\circ}35'W.$ , I set off  $39^{\circ}28'N.$ , on lat. arc,  $22^{\circ}36'N.$ , on decl. arc, and at 3h.58m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground, 5 chs. N. of the cor.

June 5, 1908.

June 6 : At 2h.29m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 6h.30m., a.m., I lay off the azimuth of Polaris,  $1^{\circ}32'$  to the west, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. east of the mark determined by the solar.

At 6h.58m., a.m., l.m.t., I set off  $39^{\circ}28'N.$ , on lat. arc,  $22^{\circ}41'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station: this mark falls 0.5 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians respectively about  $0^{\circ}26''$  west and east of the meridian established by the Polaris observations: therefore, I conclude that the adjustments

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h.30m., a.m. is  $N.16^{\circ}39'W.$ , the angle thus determined gives the mag. decl.  $16^{\circ}39'E.$

From the standard cor. already described, I retrace North, bet. secs. 31 and 36, at 40.05 chs., fall 24 lks. east of the original  $\frac{1}{4}$  sec., which is a sandstone,  $8x5x4$  ins., not firmly set and at 80.12 chs., fall 48 lks. east of the cor. of secs. 25-30-31 and 36, which is a sandstone,  $8x6x4$  ins. above ground, with marks nearly obliterated and mound of stone missing. I therefore retrace the east bdy. of T.15 S., R.12 E., as follows:

From the Stan. cor. of T.15 S., Rs. 12 and 13, I run

$N.0^{\circ}21'W.$ , retracing bet. secs. 31 and 36.

Descend abruptly over mountainous land.

10.25 Wash, 15 lks. wide, 10 ft. deep, course SE.

Foot of abrupt descent, bears NW. and SE.

Over level land.

40.05 Intersect the original  $\frac{1}{4}$  sec. cor. heretofore described, which is not of proper dimensions: I set a sandstone,  $15x10x8$  ins., 10 ins. in the ground, for re-established  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

All traces of the original  $\frac{1}{4}$  sec. cor. are obliterated in the construction of the present cor.

74.00 Leave level land, begin abrupt ascent, bears NW. and SE.

79.60 Spur, projects SW.

Descend.

80.12 Intersect the cor. of secs. 25-30-31 and 36, heretofore described, I mark 1 notch on S. and 5 notches on N. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land mountainous and level.

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

Soil, rocky, 3rd. rate; loam, 1st. rate.

No timber.

Mountainous land on 16.38 chs.

North, retracing, bet. secs. 25 and 30.

Descend over rocky and mountainous land.

4.30 Hollow, 75 ft. deep, course SW.

Abrupt ascent.

8.30 Top of abrupt ascent, bears NW. and SE.

Over level land, through dense undergrowth.

26.25 Leave level land, begin abrupt descent, bears NW. and SE.

31.35 Foot of abrupt descent, bears NW. and SE.

Gradual descent.

40.08 Fall 28 lks. E. of the  $\frac{1}{4}$  sec. cor. which is a sandstone

15x8x4 ins., loosely set, with marks nearly obliterated,

I reset same stone at same point, 10 ins. in the ground, for

$\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,

2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

I offset over the  $\frac{1}{4}$  sec. cor. and continue north.

9.20 Hollow, 75 ft. deep, course NE.

Ascend.

13.70 Spur, projects NE.

Descend.

24.20 Enter bottom of wide hollow, course SE.

Enter dense undergrowth.

40.20 Fall 18 lks. W. of the cor. of secs. 19-24-25 and 30, which is

a sandstone, 7x6x4 ins. above ground, marked as described

by the surveyor general; with no mound of stone;

I raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous and level.

Soil, rocky, 3rd. rate; loam, 1st. rate.

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

No timber.

Undergrowth, greasewood and sage.

Mountainous land or land covered with dense undergrowth on 80.28 chs.

The course of the first part of this line is  $N.0^{\circ}24'W.$  and dist., 40.08 chs., the course of north part is  $N.0^{\circ}15'E.$ , and dist. 40.20 chs.

June 6 : At this cor. I set off  $22^{\circ}41'N.$ , on decl. arc, and at 11h.58m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $39^{\circ}30'N.$

North, retracing bet. secs. 19 and 24.

Over level land in hollow, course SE., through dense undergrowth.

13.50 Road, bears NW. and SE.

17.40 Wash, 1.00 ch. wide, 15 ft. deep, course SE.

18.20 Leave hollow, begin ascent over broken land, bears NW. and SE.

40.32 Fall 27 lks. W. of the  $\frac{1}{4}$  sec. cor. bet. secs. 19 and 24, which is a sandstone, 12x6x4 ins. above ground, marked as described by the surveyor general, with mound of stone missing: I raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

I offset over the  $\frac{1}{4}$  sec. cor. and continue north

0.80 Rocky spur, projects SW.

Abrupt descent.

11.00 Wash, 1.00 ch. wide, 15 ft. deep, course SW.

Enter hollow, course SW.

11.75 Wire fence bears E. and W.

Enter Big Spring Ranch, owned by J. Sharp.

Enter dense undergrowth.

19.90 Enter cultivated land, bears SW. 10.00 chs. and NE. 20.00 chs. dist.

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- 32.00 Leave cultivated land, bears SW. 10.00 chs. and NE. 20.00 chs. dist.
- 33.50 Road, bears NE. and SW.  
Leave hollow, begin abrupt ascent, bears NE. and SW.
- 37.50 Spur, projects SW.  
Abrupt descent.
- 39.80 Fall 65 lks. W. of the cor. of secs. 13-18-19 and 24, which is a sandstone, 8x8x6 ins. above ground, marked as described by the surveyor general, with mound of stone missing: I raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.  
Land, mountainous.  
Soil, rocky, 3rd. rate : loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Mountainous land or land covered with dense undergrowth on 68.02 chs.  
The course of S. half of line is N. 0° 23' E. and the N. half, N. 0° 56' E.  
North, retracing bet. secs. 13 and 18.  
Descend over rocky and mountainous land.
- 3.25 Hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 8.40 Top of abrupt ascent, bears NE. and SW.  
Gradual ascent over rolling land, through dense undergrowth.
- 10.00 Wire fence, bears NE. and SW.
- 16.70 Road, bears NE. and SW.
- 39.40 Fall 56 lks. E. of the ¼ sec. cor. bet. secs. 13 and 18, which is a sandstone, 15x10x4 ins., loosely set: marked as described by the surveyor general, mound of stone missing I set same stone at same point, 10 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- I offset over the  $\frac{1}{4}$  sec. cor. and continue north
- 4.38 Road from Mounds to Sunnyside, bears NE. and SW.
- 6.40 Telephone line, bet. Price and Sunnyside, bears NE. and SW.
- 39.88 Fall 25 lks. W. of the cor. of secs. 7-12-13 and 18, which is a sandstone, 10x10x3 ins., loosely set, marked as described by the surveyor general, stone not of proper dimensions: I set a sandstone, 15x12x4 ins., 10 ins. in the ground, for re-established cor. of secs. 7-12-13 and 18, marked with 4 notches on S. and 2 notches on N. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.
- The original cor. is obliterated by the construction of this cor.
- Land, mountainous and rolling.
- Soil, rocky, 3rd. rate : loam, 1st. rate.
- No timber.
- Undergrowth, sage and greasewood.
- Mountainous land or land covered with dense undergrowth on 79.28 chs.
- The course of the S. half of this line is N. 0° 48' W. and of the N. half, N. 0° 21' E.
- 
- North, retracing, bet. secs. 7 and 12.
- Gradual descent through dense undergrowth
- 12.30 Hollow, 50 ft. deep, course SW.
- Ascend.
- 16.00 Spur, projects SW.
- Descend.
- 20.30 Road, bears NW. and SE.
- 20.80 Hollow, 50 ft. deep, course W.
- Ascend.
- 25.00 Rocky spur, projects W.
- Descend.

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- 34.80 Telegraph line bears N.84°10'E., and S.84°10'W.
- 35.29 Middle of track of the Sunnyside branch of the Denver and Rio Grande Railroad, bears N.84°10'E. and S.84°10'W.
- 40.36 Fall 36 lks. west of the  $\frac{1}{4}$  sec. cor. bet. secs. 7 and 12, which is a sandstone, 10x6x4 ins. above ground, marked as described by the surveyor general, with mound of stone missing.
- I dig pits, 18x18x12 ins., N. and S. of stone 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- I offset over the  $\frac{1}{4}$  sec. cor. and continue north
- 39.94 Fall 25 lks. west of the cor. of secs. 1-6-7 and 12, which is a sandstone, 8x6x5 ins. above ground, marked and witnessed as described by the surveyor general.
- Land rolling.
- Soil, rocky, 3rd. rate; loam, 1st. rate.
- Undergrowth, sage and greasewood.
- Land covered with dense undergrowth on 80.30 chs.
- The course of the S. half of this line is N.0°30'E., and of the N. half N.0°21'E.
- 
- North, retracing bet. secs. 1 and 6.
- Gradual descent through dense undergrowth.
- 5.90 Road, bears NW. and SE.
- 21.51 Irrigating ditch, 10 lks. wide, course W.
- 38.00 Cottonwood Wash, 30 lks. wide, 10 ft. deep, course SW.
- Ascend.
- 39.90 Fall 24 lks. west of the  $\frac{1}{4}$  sec. cor. bet. secs. 1 and 6 which is a sandstone, 15x10x5 ins., loosely set, with mound of stone missing, marked as described by the surveyor general.
- I set same stone at same point, 10 ins. in the ground, marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

## RETRACEMENT OF THE EAST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

Pits impracticable.

I offset over the  $\frac{1}{2}$  sec.cor.and continue north.

0.25 Road from Price to Sunnyside, bears E.and W.

10.50 Over level land, leave undergrowth.

30.00 Leave level land.

Ascend.

35.00 Begin abrupt ascent bears NW.and SE.

38.50 Spur projects W.

Descend.

39.86 Fall 36 lks.west of the cor.of Tps.14 and 15 S.,Rs.  
12 and 13 E., which is a sandstone, 26x12x3 ins., above  
ground, loosely set, marked as described by the surveyor  
general, with mound of stone missing;

I set same stone at same point 19 ins.in the ground,  
for cor.of Tps.14 and 15 S.,Rs.12 and 13 E., marked with  
6 notches on each edge,  
and raise a mound of stone, 2 ft.base,  $1\frac{1}{2}$  ft.high, S.of cor.

Pits impracticable.

Land, rolling, level and mountainous.

Soil, loam 1st.rate; rocky, 3rd.rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous  
land on 55.26 chs.

The course of the S.half of this line is N.0°21'E.,  
and the N.half is N.0°31'E.

June 6, 1908

## RETRACEMENT OF THE WEST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

June 8 :1908: I begin at the Standard cor.of Tps.15 S., R.11 E., heretofore described, and at 6h.59m., a.m., l.m.t., I set off  $39^{\circ}28'N.$ , on lat.arc.,  $22^{\circ}52'N.$ , on decl.arc, and determine a meridian with the solar.

Thence I run

North, retracing bet.secs.31 and 36.

As the original field notes do not give important topography between these sections, I report the following:

- 25.15 Road from Price to Mounds, bears NW. and SE.
- 30.48 Middle of track of the main line of the Denver and Rio Grande Railroad, bears  $N.64^{\circ}20'W.$ , and  $S.64^{\circ}20'E.$
- 31.29 Telegraph line, bears  $N.64^{\circ}20'W.$ , and  $S.64^{\circ}20'E.$
- 40.26 Intersect the  $\frac{1}{2}$  sec.cor.bet.secs.31 and 36, which is a shale stone, 6x6x6 ins.above ground, marked and witnessed as described by the surveyor general.
- 46.60 Telephone line, between Price and Sunnyside, bears NW and SE.
- 80.65 Intersect the cor.of secs.25-30-31 and 36, which is a shale stone, 8x6x5 ins.above ground, marked and witnessed as described by the surveyor general.
- The course of this line is therefore north.
- 
- North, retracing bet.secs.25 and 30.
- 39.80 Intersect the  $\frac{1}{4}$  sec.cor.bet.secs.25 and 30, which is a shale stone, 9 x 8 x 4 ins., above ground, marked and witnessed as described by the surveyor general.
- 80.64 Intersect the cor.of secs. 19-24-25 and 30, which is a shale stone, 12 x 10 x  $1\frac{1}{2}$  ins.above ground, marked and witnessed as described by the surveyor general.

The course of this line is therefore North.

---

## RETRACEMENT OF THE WEST BOUNDARY OF T.15 S., R.12 E.

## CHAINS

- North, retracing bet. secs. 19 and 24.
- 40.12 Fall 11 lks. east of the  $\frac{1}{4}$  sec. cor. bet. secs. 19 and 24, which is a sandstone, 14 x 8 x 3 ins. above ground, marked and witnessed as described by the surveyor general.
- 80.56 Fall 22 lks. E. of the cor. of secs. 13-18-19 and 24, which is a cedar post, 4 ins. sq., 24 ins. above ground, marked and witnessed as described by the surveyor general.  
The course of this line is therefore, N. 0° 09' W.
- 
- North, retracing bet. secs. 13 and 18.
- 40.10 Intersect the  $\frac{1}{4}$  sec. cor. bet. secs. 13 and 18, which is a sandstone, 9x8x5 ins. above ground, marked and witnessed as described by the surveyor general.
- 80.41 Intersect the cor. of secs. 7-12-13 and 18, which is a sandstone, 10x5x5 ins. above ground, marked and witnessed as described by the surveyor general.  
The course of this line is therefore north.
- 
- North, retracing bet. secs. 7 and 12.
- 40.11 Fall 7 lks. E. of the  $\frac{1}{4}$  sec. cor. bet. secs. 7 and 12, which is a sandstone, 10x7x6 ins. above ground, marked and witnessed as described by the surveyor general.
- 80.58 Fall 15 lks. E. of the cor. of secs. 1-6-7 and 12, which is a sandstone, 12x6x2 ins. above ground, marked and witnessed as described by the surveyor general.  
The course of this line is therefore N. 0° 06' W.
- 
- North, retracing bet. secs. 1 and 6.
- 40.35 Fall 26 lks. E. of the  $\frac{1}{4}$  sec. cor. bet. secs. 1 and 6, which is a sandstone, 9x8x6 ins. above ground, marked and witnessed as described by the surveyor general.

RETRACEMENT OF THE WEST BOUNDARY OF T.15 S., R.12 E.

CHAINS

80.97 Fall 52 lks. E. of the cor. of Tps. 14 and 15 S., Rs. 11 and 12 E., heretofore described.

The course of this line is therefore N.0°22'W.

June 8, 1908.

BOUNDARIES OF T.15 S., R.12 E.

Latitudes, departures and closing errors.

Line Designated	True Bearing	Distance	Latitudes		Departures	
			N.	S.	E.	W.
3rd. Stan. Par. S.	West	481.54				
		Chs.	Chs.	Chs.	Chs.	Chs.
West Bdy.	North	158.23	158.23			
	N.0°09'W.	80.56	80.56			0.21
	North	80.41	80.41			
	N.0°06'W.	80.58	80.58			0.14
	N.0°22'W.	80.97	80.97			0.52
North Bdy,	S.89°55'E.	482.59		0.70	482.59	
East Bdy.	S.0°39'W.	39.86		39.86		0.36
	S.0°21'W.	39.90		39.90		0.24
	S.0°21'W.	39.94		39.94		0.24
	S.0°30'W.	40.36		40.36		0.36
	S.0°21'W.	39.88		39.88		0.24
	S.0°48'E.	39.40		39.40	0.55	
	S.0°56'W.	39.80		39.79		0.65
	S.0°23'W.	40.32		40.32		0.27
	S.0°15'W.	40.20		40.20		0.17
	S.0°24'E.	40.08		40.08	0.28	
	S.0°21'E.	80.12		80.12	0.49	
Convergency					0.60	
Totals			480.75	480.55	484.51	484.94
Error in lat. and dep.			480.55			484.51
			0.20			0.46

*J. J. ...*  
U.S. Deputy Surveyor

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist,

United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of retracement of E. & W. bdy. of T. 15 S., R. 12 E., S. L. B. & M., in the state of Utah

showing the respective capacities in which they acted:

- Manderson W. Houghton ..... Chairman.
- Walter A. Stumm, ..... Chairman.
- Earl Woolley ..... Moundman.
- ..... Moundman.
- Claude L. Heist, ..... Arman.
- ..... Arman.
- Charlie Stumm, ..... Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist,

United States Deputy Surveyor, in retracing those parts or portions of the E. & W. bdy. of T. 15 S., R. 12 E.

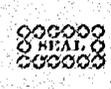
of the Salt Lake

Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

- Manderson W. Houghton ..... Chairman.
- Walter A. Stumm ..... Chairman.
- Earl Woolley ..... Moundman.
- ..... Moundman.
- Claude L. Heist ..... Arman.
- ..... Arman.
- Charlie Stumm ..... Flagman.

Subscribed and sworn to before me this 8th day of June, 1908

Harvey D. Heist U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, do solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of the 21st. day of March, 1907, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, ~~surveyed~~ <sup>retraced</sup> all those parts or portions of T. & W. Bdy. of T. 15 S., R. 12 E.

of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been ~~surveyed~~ <sup>retraced</sup> by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey. ~~retracement~~

*Harvey D. Heist*  
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me this 12th day of October, 1908.

*Thomas Hull*  
U. S. Surveyor-General  
for Utah.



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 190

The foregoing field notes of the survey of retracement of the East and West Boundaries of Township No. 15 South, Range No. 12 East of the Salt Lake Base and Meridian, Utah.

executed by Harvey D. Heist and Job H. Winwood, their 298 under his contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the ~~surveys~~ <sup>retracements</sup> they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office.

United States Surveyor General

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BOOK A-349

FILED

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# FIELD NOTES

OF THE SURVEY OF THE

SUBDIVISIONS

of

Township No. 15 South,

Range No. 12 East,

Of the salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

Under <sup>their</sup> ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced June 8, 1908

Survey completed June 16, 1908

6-161

high 52-18-34  
low 7-67-81

Closing 11-00

## NAMES AND DUTIES OF ASSISTANTS.

Manderson W. Houghton, Chainman

Walter A. Stumm, "

Earl Woolley, Moundman

Homer Petty, "

Claude L. Heist, Axman

Charlie Stumm, Flagman

**Volume**  
**#**  
**R0349**

## BOOK A-349

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

We, Manderson W. Houghton and Walter A. Stumm,

do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey

Subdivisions of T.15 S., R.12 E. of the Salt Lake Base and Meridian, Utah.

Manderson W. Houghton Chainman  
Walter A. Stumm, Chainman

Subscribed and sworn to before me this 9th. day of June, 1908



Jawey H. Geist  
U.S. Deputy Surveyor

We, Earl Woolley and Homer Petty

do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey

Subdivisions of T.15 S., R.12 E. of the Salt Lake Base and Meridian, Utah.

Earl Woolley Moundman  
Homer Petty Moundman

Subscribed and sworn to before me this 9th. day of June, 1908



Jawey H. Geist  
U.S. Deputy Surveyor

We, I, Claude L. Heist, and

do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey

Subdivisions of T.15 S., R.12 E. of the Salt Lake Base and Meridian, Utah.

Claude L. Heist Axman

Subscribed and sworn to before me this 9th. day of June, 1908



Jawey H. Geist  
U.S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of

Subdivisions of T.15 S., R.12 E. of the Salt Lake Base and Meridian, Utah.

Charlie Stumm, Flagman

Subscribed and sworn to before me this 9th. day of June, 1908



Jawey H. Geist  
U.S. Deputy Surveyor

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Survey commenced, June 8, 1908, and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors, then, to test the solar apparatus, by comparing its indications resulting from solar observations made during a.m. and p.m. hours with a meridian determined by observations on Polaris, I proceed as follows:

At the standard cor. of secs. 35 and 36, heretofore described, in approximate latitude  $39^{\circ}28'N.$ , longitude  $110^{\circ}34'W.$ , I set off  $39^{\circ}28'N.$ , on lat. arc,  $22^{\circ}54'N.$  on decl. arc, and at 3h.59m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone, firmly set in the ground, 5 chs. N. of the cor.

June 8, 1908.

June 9 : At 2h.17m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined on a peg driven in the ground, 5 chs. N. of my station.

At 6h.30m., a.m., I lay off the azimuth of Polaris,  $1^{\circ}32'$  to the west, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.4 ins. east of the mark determined by the solar.

At 6h.59m., a.m., l.m.t., I set off  $39^{\circ}28'N.$ , on lat. arc,  $22^{\circ}57'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station; this mark falls 0.4 ins. east of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about  $0'21''$  west and east of the meridian established by the Polaris observations: therefore, I conclude that the adjustments

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h.30m. a.m. is N.16°40'W., the angle thus determined gives the mag. decl. 16°40'E.

The east bdy. of the Tp. being out of limits for course,

I run a sectional guide meridian as follows:

From the stan. cor. of secs. 35 and 36, already described

I run

North, on sectional guide meridian,

Bet. secs. 35 and 36.

Descend over mountainous land.

20.25 Hollow, 75 ft. deep, course E.

Abrupt ascent.

25.50 Top of abrupt ascent, bears NE. and SW.

Gradual ascent over mesa, through dense undergrowth.

40.00 Set a sandstone, 18x14x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 18x14x9 ins., 12 ins. in the ground, for cor. of secs. 25-26-35 and 36, marked with 1 notch on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous and nearly level.

Soil, rocky, 3rd. rate ; loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

North, on sectional guide meridian,

Bet. secs. 25 and 26.

Gradual ascent over mesa, through dense undergrowth.

40.00 Set a sandstone, 16x10x8 ins., 11 ins. in the ground, for

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

$\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

80.00 Set a sandstone, 17x8x6 ins., 12 ins. in the ground, for cor. of secs. 23-24-25 and 26, marked with 2 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, sloping south.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

---

North, on sectional guide meridian,

Bet. secs. 23 and 24.

Gradual ascent through dense undergrowth.

8.35 Road from Mounds to Sunnyside, bears NE. and SW.

10.28 Telephone line, between Price and Sunnyside, bears N.E. and SW.

40.00 Set a sandstone, 14x12x10 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 15x14x10 ins., 10 ins. in the ground, for cor. of secs. 13-14-23 and 24, marked with 3 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, sloping south.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

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## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

North, on sectional guide meridian,

Bet. secs. 13 and 14.

Gradual ascent over rolling land, through dense undergrowth.

32.00 Begin abrupt descent, bears NE. and SW.

36.50 Hollow, 75 ft. deep, course SW.

Ascend over rolling land.

40.00 Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

80.00 Set a sandstone, 18x8x7 ins., 12 ins. in the ground, for cor. of secs. 11-12-13 and 14, marked with 4 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, loam, 2nd. and 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

North, on sectional guide meridian,

Bet. secs. 11 and 12.

Over rolling land.

26.45 Telegraph line, bears N.  $84^{\circ}10'$  E. and S.  $84^{\circ}10'$  W.

26.96 Middle of track of the Sunnyside branch of the Denver and Rio Grande Railroad, bears N.  $84^{\circ}10'$  E., and S.  $84^{\circ}10'$  W.

40.00 Set a sandstone, 16x8x6 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

80.00 Set a sandstone, 16x14x6 ins., 11 ins. in the ground, for cor. of secs. 1-2-11 and 12, marked with 5 notches on S. and 1 notch on E. edges, and raise a mound of stone, 2 ft. base,

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

1½ ft. high, W. of cor.

Pits impracticable.

From this cor. the cabin of R.M. Gailbraith, bears N. 1° 39' W.

The tent house of William McMillan, and George Hill, bears N. 49° 18' E.

The tent house of C.H. Miller, bears S. 83° 52' E.

Land rolling.

Soil, loam, 2nd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

Knowing the line bet. secs. 1 and 2, will close within limits on the N. bdy. of the Tp., I run

North, on a sectional guide meridian,

Bet. secs. 1 and 2.

Descend over rolling land, through dense undergrowth.

14.75 Cottonwood Wash, 60 lks. wide, 15 ft. deep, course SW.

Gradual ascent over rolling land.

32.10 Price and Sunnyside road, bears NE and SW.

40.00 Set a sandstone, 16x11x7 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, W. of cor.

From this cor. the cabin belonging to R.M. Gailbraith, bears N. 22° 16' W.

42.25 Road, bears NW. and SE.

49.00 Enter cultivated land, bears E. and W.

52.25 Leave cultivated land bears E. and W.

This land is cultivated by R.M. Gailbraith.

79.94 Intersect N. bdy. of Tp., 1.23 chs., N. 89° 55' W., from the cor. of secs. 1-2-35 and 36, heretofore described.

76.69  
3.25 Set a sandstone, 18x14x9 ins., 12 ins. in the ground, for

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS

closing cor. of secs. 1 and 2, marked CC on S., with 1 groove on E. and 5 grooves on W. faces, dig pits, 24x18x12 ins., crosswise on each line, E. and W., 3 ft. and S. of stone, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.

I destroy all marks on the cor. of secs. 1-2-35 and 36, that pertain to T.15 S.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth greasewood and sage.

Land covered with dense undergrowth on 76.69 chs.

June 9 : At this cor. I set off 22°58' N., on decl. arc, and at 11h.59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°33' N.

From the cor. of secs. 25-26-35 and 36, heretofore described

I run,

East, on a random line, bet. secs. 25 and 36.

40.00 Set temp. 1/4 sec. cor.

79.48 Intersect E. bdy. of Tp., 10 lks. S. of the cor. of secs. 25-30-31 and 36, heretofore described.

Thence I run

S. 89°56' W., on a true line,

Ret. secs. 25 and 36.

Descend over mountainous land.

7.00 Hollow, 75 ft. deep, course S.

Ascend.

19.50 Spur, projects SW.

Descend.

25.50 Hollow, 60 ft. deep, course SE.

Ascend.

32.50 Spur, projects SW.

Descend.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 39.00 Hollow, 60 ft. deep, course SE.  
Ascend over rolling land, through dense undergrowth.
- 39.48 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 79.48 The cor. of secs. 25-26-35 and 36.  
Land, mountainous and rolling.  
Soil, rocky and clay, 3rd. rate; loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 79.48 chs.
- 
- From the cor. of secs. 23-24-25 and 26, heretofore described,  
I run  
N. 89° 56' E., on a random line, bet. secs. 24 and 25.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.33 Intersect E. bdy. of Tp., 15 lks. S. of the cor. of secs. 19-24-25 and 30, heretofore described.  
Thence I run  
S. 89° 50' W., on a true line,  
Bet. secs. 24 and 25.  
Over level land, through dense undergrowth.
- 13.00 Begin abrupt ascent bears NW. and SE.
- 31.50 Road, bears NE. and SW.
- 32.50 Top of abrupt ascent, bears NE. and SW.  
Gradual ascent over rolling land, through dense undergrowth.
- 39.33 Set a sandstone, 16x12x7 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 40.43 Same road, bears NW. and SE.
- 79.33 The cor. of secs. 23-24-25 and 26.  
Land, mountainous and rolling.  
Soil, clay and rocky, 3rd. rate; loam, 1st. and 2nd. rate.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 79.33 chs.
- 
- N. 89° 50' E., on a random line bet. secs. 13 and 24.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.22 Intersect E. bdy. of Tp., 11 lks. S. of the cor. of secs. 13-18-19 and 24, heretofore described.  
Thence I run  
S. 89° 45' W., on a true line,  
Ret. secs. 13 and 24.  
Descend over mountainous land.
- 5.00 Hollow, 75 ft. deep, course SW.  
Abrupt ascent.
- 7.05 Wire fence, bears NE. and SW.
- 9.00 Top of abrupt ascent, bears NE. and SW.  
Ascend.
- 21.75 Spur, projectw S.  
Abrupt descent.
- 24.75 Hollow, 80 ft. deep, course SE.  
Abrupt ascent.
- 28.24 Top of abrupt ascent, bears NW. and SE.  
Gradual ascent over rolling land, through dense undergrowth.
- 30.94 Mounds and Sunnyside, road, bears NE. and SW.
- 31.07 Telephone line, between Price and Sunnyside, bears NE. and SW.
- 40.22 Set a sandstone, 16x12x6 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 5½ ft. base, 1½ ft. high; N. of cor.
- 80.22 The cor. of secs. 13-14-23 and 24.  
Land, mountainous and rolling.  
Soil, clay and rocky, 3rd. rate ; loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth or mountainous land on 80.22 chs.
- 
- From the cor. of secs. 11-12-13 and 14, heretofore described,  
I run  
N. 89° 45' E., on a random line, bet. secs. 12 and 13.
- 40.00 Set temp. ¼ sec. cor.
- 79.90 Intersect the E. bdy. of Tp., 45 lks. N. of the cor. of secs. 7-12-13 and 18, heretofore described.  
Thence I run  
N. 89° 56' W., on a true line,  
Bet. secs. 12 and 13.  
Gradual descent over rolling land, through dense undergrowth.
- 39.90 Set a sandstone, 18x12x4 ins., 12 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor.
- 79.90 The cor. of secs. 11-12-13 and 14.  
Land, rolling.  
Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 79.90 chs.
-

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

From the cor. of secs. 1-2-11 and 12, heretofore described,  
I run

S.  $89^{\circ}56'E.$ , on a random line, bet. secs. 1 and 12.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.51 Intersect E. bdy. of Tp., 24 lks. S. of the cor. of secs.  
1-6-7 and 12, heretofore described.

Thence I run

S.  $89^{\circ}54'W.$ , on a true line,

Bet. secs. 1 and 12.

Gradual descent through dense undergrowth.

28.50 NE. cor. of C.H. Miller's cultivated land, bears S. 10.00 chs.  
Along N. edge of cultivated land and wire fence, bears E.  
and W.

40.04 Road, bears N. and S.

C.H. Miller's tent house bears S., 4.30 chs. dist.

Leave cultivated land, bears south, 10.00 chs.

40.51 Set a sandstone, 14x8x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable. From this cor. tent house of C.H. Miller  
and William McMillian, bears N.  $0^{\circ}10'W.$

79.50 Leave wire fence, end of fence.

80.51 The cor. of secs. 1-2-11 and 12.

28.52  
52.51 Land, sloping west.

Soil, loam, 1st. rate.

No timber.

Undergrowth, sage.

Land covered with dense undergrowth on 28.50 chs.

June 9, 1908.

June 10 : At 6h.59m., a.m., l.m.t., I set off  $39^{\circ}28'N.$ , on  
lat. arc,  $23^{\circ}02'N.$ , on decl. arc, and determine a meridian  
with the solar, at the standard cor. of secs. 34 and 35,  
heretofore described.

Thence I run

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

N.0°01'W., bet. secs. 34 and 35.

Descend abruptly over rocky and mountainous land.

2.25 Hollow, 150 ft. deep, course W.

Abrupt ascent.

6.15 Perpendicular sandstone ledge, 40 ft. high, bears E. and W.

9.00 Spur, projects W.

Abrupt descent.

16.50 Hollow, 100 ft. deep, course SW.

Ascend over broken land.

26.50 Spur, projects SW.

Descend.

28.75 Hollow, 75 ft. deep, course SW.

Ascend.

31.00 Spur, projects SW.

Descend.

40.00 Hollow, 75 ft. deep, course W.

Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Ascend.

45.00 Spur, projects W.

Abrupt descent.

50.00 Foot of abrupt descent, bears NE. and SW.

Gradual ascent

60.50 Road, from Mounds to Sunnyside, bears NE. and SW.

70.00 Wash, 40 lks. wide, 4 ft. deep, course SW.

80.00 Set a sandstone, 18x11x7 ins., 12 ins. in the ground, for cor.

of secs. 26-27-34 and 35, marked with 1 notch on S. and 2 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky and clay, 3rd. and 4th. rate.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

No timber.

Mountainous land on 80.00 chs.

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East, on a random line, bet. secs. 26 and 35.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 25-26-35 and 36.

Thence I run

↓  
N.  $89^{\circ}59'W.$ , on a true line,

Bet. secs. 26 and 35.

Ascend over rolling land, through dense undergrowth.

34.90 Ridge, bears N. and S.

Abrupt descent.

39.99 Set a sandstone, 17x11x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

49.25 Hollow, 75 ft. deep, course SW.

Ascend.

59.00 Road from Mounds to Sunnyside, bears NE. and SW.

65.00 Spur, projects SW.

Descend.

70.50 Old road, bears NE. and SW.

79.98 The cor. of secs. 26-27-34 and 35.

Land, rolling and mountainous.

Soil, loam, 1st. rate ; clay, 3rd. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth or mountainous

land on 79.98 chs.

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## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

N.0°01'W., bet. secs. 26 and 27

Ascend through dense undergrowth.

- 1.20 Telephone line, between Price and Sunnyside, bears NE. and SW.
- 10.00 Wash, 60 lks. wide, 10 ft. deep, course SW.
- 31.00 Begin abrupt ascent, bears NE. and SW.
- 35.50 Ridge, bears NE. and SW.  
Descend.
- 40.00 Set a sandstone, 16x12x10 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 42.35 Wash, 15 lks. wide, 5 ft. deep, in hollow, 100 ft. deep, course SW.  
Abrupt ascent.
- 51.50 Spur, projects SW.  
Descend.
- 55.30 Hollow, 75 ft. deep, course SW.  
Ascend.
- 62.50 Spur, projects SW.  
Descend.
- 67.50 Hollow, 75 ft. deep, course SW.  
Ascend.
- 70.00 Ridge, bears NE. and SW.  
Descend.
- 80.00 Set a sandstone, 18x6x6 ins., 12 ins. in the ground, for cor. of secs. 22-23-26 and 27, marked with 2 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
Land, rolling and mountainous.  
Soil, clay and rocky, 3rd. rate.  
No timber.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- Undergrowth, grasswood and sage.  
Land covered with dense undergrowth or mountainous land on 20.00 chs.
- 
- S.89°59'E., on a random line, bet. secs. 23 and 26.  
40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
79.96 Intersect N. and S. line, 3 lks. N. of the cor. of secs. 23-24-25 and 26.  
Thence I run  
N.89°58'W., on a true line,  
Bet. secs. 23 and 26.
- Ascend over rolling land, through dense undergrowth.  
6.80 Road, from Mounds to Sunnyside, bears NE. and SW.  
7.18 Telephone line, between Price and Sunnyside, bears NE. and SW.  
39.98 Set a sandstone, 17x9x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.  
55.00 Ridge, bears NE. and SE.  
Descend.  
60.00 Hollow, 50 ft. deep, course SW.  
Ascend.  
63.75 Ridge, bears NE. and SW.  
Descend.  
68.50 Hollow, 75 ft. deep, course SW.  
Ascend.  
75.75 Spur, projects SW.  
Descend.  
79.96 The cor. of secs. 22-23-25 and 27.  
Land, rolling and mountainous.  
Soil, loam, 1st. rate : clay, 3rd. rate.  
No timber.

## SUBDIVISIONS OF T. 15 S., R. 12 E.

## CHAINS

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on mountainous land on 79.96 chs.

June 10 : At this cor. I set off  $23^{\circ}02'N.$ , on decl. arc, and at 11h.59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is  $39^{\circ}30'N.$

N.  $0^{\circ}01'W.$ , bet. secs. 22 and 23.

Descend over rocky and mountainous land.

16.00 Hollow, 75 ft. deep, course SW.

Ascend.

23.50 Spur, projects SW.

Descend.

25.25 Hollow, 50 ft. deep, course SW.

Ascend.

29.00 Ridge, bears NE. and SW.

Abrupt descent.

38.50 Foot of abrupt descent, bears NE. and SW.

Descend over rolling land, through dense undergrowth.

40.00 Set a sandstone, 16x8x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

67.35 Hollow, 100 ft. deep, course SW.

Abrupt ascent.

75.00 Spur, projects SW.

Descend.

80.00 Set a sandstone, 16x8x7 ins., 11 ins. in the ground, for cor. of secs. 14-15-22 and 23, marked with 3 notches on S. and 2 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous and rolling.

Soil, rocky and clay, 2nd. and 3rd. rate.

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS	
	No timber. Undergrowth, greasewood and sage. Land covered with dense undergrowth or mountainous land on 80.00 chs.
	—————
	S.89°58'E., on a random line, bet. secs. 14 and 23.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 13-14-23 and 24. Thence I run N.89°59'W., on a true line, Bet. secs. 14 and 23.
	Descend gradually over rolling land, through dense undergrowth.
39.96	Set a sandstone, 18x8x4 ins., 12 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor. Pits impracticable.
47.00	Begin abrupt descent, bears NE. and SW.
52.25	Hollow, 75 ft. deep, course SW. Ascend.
60.00	Spur, projects SW. Descend.
63.75	Hollow, 60 ft. deep, course SW. Ascend.
65.50	Spur, projects SW. Descend.
72.75	Hollow, 60 ft. deep, course SW. Ascend.
77.50	Ridge, bears NE. and SW. Descend.
79.92	The cor. of secs. 14-15-22 and 23. Land, rolling and mountainous. Soil, loam, 1st rate; clay and rocky, 3rd. rate. No timber. Undergrowth, greasewood and sage

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS	
	Land covered with dense undergrowth or mountainous land on 79.92 chs.
	N.0°01'W., bet.secs.14 and 15.
	Descend over rocky and mountainous land.
4.50	Hollow, 40 ft. deep, course SW.
	Ascend.
25.00	Ridge, bears NE. and SW.
	Descend over rolling land, through dense undergrowth.
40.00	Set a sandstone, 16x8x7 ins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on W. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$ ft. high, W. of cor.
	Pits impracticable.
80.00	Set a sandstone, 16x11x5 ins., 11 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked with 4 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
	Land, mountainous and rolling.
	Soil, rocky and clay, 3rd. rate: loam, 1st. rate.
	No timber.
	Undergrowth, greasewood and sage.
	Land covered with dense undergrowth or mountainous land on 80.00 chs.
	S.89°59'E., on a random line, bet.secs.11 and 14.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
79.92	Intersect N. and S. line, 5 lks. N. of the cor. of secs. 11-12-13 and 14.
	Thence I run
	N.89°57'W., on a true line,
	Bet.secs.11 and 14.
	Gradual descent over rolling land, through dense undergrowth.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

39.96 Set a sandstone, 14x8x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

79.92 The cor. of secs. 10-11-14 and 15.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 79.92 chs.

June 10, 1908.

June 11 : At 6h.59m., a.m., l.m.t., I set off  $39^{\circ}31'N.$ , on lat. arc,  $23^{\circ}07'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 10-11-14 and 15.

Thence I run

$N.0^{\circ}01'W.$ , bet. secs. 10 and 11.

Gradual descent over rolling land, through dense undergrowth.

14.22 Telegraph line, bears NE. and SW.

14.71 Middle of track, on a wooden bridge, of the Sunnyside branch of the Denver and Rio Grande Railroad, bears  $N.67^{\circ}45'E.$  and  $S.67^{\circ}45'W.$

40.00 Set a sandstone, 16x12x4 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N., and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

59.50 Cottonwood Wash, 3.00 chs. wide, 15 ft. deep, course SW.  
Gradual ascent.

80.00 Set a sandstone, 18x10x5 ins., 12 ins. in the ground, for cor. of secs. 2-3-10 and 11, marked with 5 notches on S. and 2 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Land, rolling.

Soil, sandy loam, 1st. rate.

No timber.

Undergrowth, greasewood and sage.

Land covered with dense undergrowth on 80.00 chs.

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S. 89° 57' W., on a random line, bet. secs. 2 and 11.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 12 lks. S. of the cor. of secs.  
1-2-11. and 12.

Thence I run

S. 89° 58' W., on a true line,

Bet. secs. 2 and 11.

Gradual descent over rolling land, through dense  
undergrowth.

24.50 Cottonwood Wash, 1.90 chs. wide, 20 ft. deep, course SW.

Gradual ascent.

39.99 Set a sandstone, 18x10x7 ins., 12 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and  
W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft.  
base,  $1\frac{1}{2}$  ft. high, N. of cor.

47.78 Knoll on line, 40 ft. high.

79.98 The cor. of secs. 2-3-10 and 11.

Land, rolling.

Soil, loam, 1st. rate.

No timber.

Land covered with dense undergrowth on 79.98 chs.

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Knowing the line bet. secs. 2 and 3 will not close within  
limits on the N. bdy. of the Tp., I run

N. 0° 01' W., on a true line,

Bet. secs. 2 and 3.

Ascend gradually over rolling land, through dense  
Undergrowth.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 17.70 Road from Price to Sunnyside, bears E. and W.
- 40.00 Set a sandstone, 18x10x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 80.21 Intersect N. bdy. of Tp., 1.11 chs. N. 89° 55' W. of the cor. of secs. 2-3-34 and 35, heretofore described.  
Set a sandstone, 18x10x5 ins., 12 ins. in the ground, for closing cor. of secs. 2 and 3, marked CC on S., and with 2 grooves on E. and 4 grooves on W. faces, dig pits, 24x18x12 ins. crosswise on each line, E. and W. 3 ft. and S. of stone, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.  
I destroy all marks on the cor. of secs. 2-3-34 and 35 that pertain to T.15 S.  
Land, rolling.  
Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth, on 80.21 chs.  
June 11 : At this cor. I set off 23° 07' N., on decl. arc, and at 11h. 59m., a.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39° 33' N.
- 
- From the standard cor. of secs. 33 and 34, heretofore described, I run  
N. 0° 01' W., bet. secs. 33 and 34.  
Gradual ascent through dense undergrowth.
- 30.00 Wash, 1.10 chs. wide, 5 ft. deep, course SE.
- 39.00 Begin abrupt ascent over rocky land, bears E. and W.
- 40.00 Set a sandstone, 18x10x6 ins., in a mound of stone, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Pits impracticable.

On account of natural obstacles, it is impossible to set this cor. in the ground.

41.20 Rocky spur, projects E.

Abrupt descent.

43.00 Foot of abrupt descent, bears NW. and SE.

Gradual ascent.

44.50 Wash, 90 lks. wide, 16 ft. deep, course SE.

56.50 Cottonwood Wash, 1.25 chs. wide, 15 ft. deep, course SE.

65.45 Cottonwood Wash, 1.00 ch. wide, 13 ft. deep, course SW.

80.00 Set a sandstone, 16x11x4 ins., 11 ins. in the ground, for cor. of secs. 27-28-33 and 34, marked with 1 notch on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, sloping south, and mountainous.

Soil, sandy, 2nd. rate; rocky, 3rd. rate.

No timber.

Undergrowth, greasewood .

Land covered with dense undergrowth or mountainous land on 80.00 chs.

East, on a random line, bet. secs. 27 and 34.

40.00 Set temp. ¼ sec. cor.

80.04 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 26-27-34 and 35.

Thence I run

N. 89° 58' W., on a true line,

Bet. secs. 27 and 34.

Ascend through dense undergrowth, over mountainous land.

1.15 Telephone line, between Price and Sunnyside, bears NE. and SW.

11.50 Wash, 60 lks. wide, 6 ft. deep, course SW.

19.00 Spur, projects S.

Abrupt descent.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 26.00 Hollow, 75 ft. deep, course S.  
Abrupt ascent.
- 31.00 Top of abrupt ascent, bears NE. and SW.  
Ascend.
- 40.02 Set a sandstone, 20x10x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 44.00 Spur, projects SW.  
Abrupt descent.
- 49.50 Foot of abrupt descent, bears N. and S.  
Over level land, through dense undergrowth.
- 51.00 Wash, 30 lks. wide, 8 ft. deep, course S.
- 64.20 Telegraph line, bears N.  $10^{\circ}06'$  E. and S.  $10^{\circ}06'$  W.
- 64.71 Middle of track of the Sunnyside branch of the Denver and Rio Grande Railroad, bears N.  $10^{\circ}06'$  E. and S.  $10^{\circ}06'$  W.
- 73.50 Cottonwood Wash, 1.50 chs. wide, 20 ft. deep, course SW.  
Gradual ascent.
- 80.04 The cor. of secs. 27-28-33 and 34.  
Land, mountainous and level.  
Soil, rocky, 3rd. rate ; sandy, 2nd. rate.  
No timber.  
Undergrowth, greasewood.  
Land covered with dense undergrowth and mountainous land on 80.04 chs.
- N.  $0^{\circ}01'$  W., bet. secs. 27 and 28.  
Gradual ascent through dense undergrowth.
- 40.00 Set a sandstone, 18x10x7 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 59.65 Enter Cottonwood Wash, 20 ft. deep, course SE.
- 60.35 Leave Cottonwood Wash.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

80.00 Set a sandstone, 16x12x5 ins., 11 ins. in the ground, for cor. of secs. 21-22-27 and 28, marked with 2 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, sloping south.

Soil, sandy, 2nd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth on 80.00 chs.

June 11, 1908

June 12: At 7 a.m., l.m.t., I set off  $39^{\circ}30'N.$ , on lat. arc,  $23^{\circ}11'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 21-22-27 and 28.

Thence I run

$S.89^{\circ}58'E.$ , on a random line, bet. secs. 22 and 27.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.98 Intersect N. and S. line, 7' lks. N. of the cor. of secs. 22-23-26 and 27.

Thence I run

$N.89^{\circ}55'W.$ , on a true line,

Bet. secs. 22 and 27.

Descend over mountainous land.

39.99 Set a sandstone, 14x8x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

44.75 Hollow, 100 ft. deep course SW.

Ascend.

53.50 Spur, projects S.

Abrupt descent.

56.00 Foot of abrupt descent, bears NW. and SE.

Over level land, through dense undergrowth.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 65.97 Telegraph line, bears N.10°27'W. and S.10°27'E.
- 66.46 Middle of track of the Sunnyside branch of the Denver and Rio Grande Railroad, bears N.10°27'W. and S.10°27'E.
- 79.98 The cor. of secs. 21-22-27 and 28.  
Land, mountainous and level.  
Soil, rocky and clay, 3rd. rate; sandy, 2nd. rate.  
No timber.  
Undergrowth, greasewood.  
Land covered with dense undergrowth or mountainous land on 79.98 chs.
- 
- N.0°01'W., bet. secs. 21 and 22.  
Gradual ascent through dense undergrowth.
- 40.00 Set a sandstone, 17x14x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a sandstone, 18x9x8 ins., 12 ins. in the ground, for cor. of secs. 15-16-21 and 22, marked 15 S on NE. and 12 E on SE face, with 3 notches on S. and E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.  
From the cor. the 5 Mile Post, on the Sunnyside branch of the Denver and Rio Grande Railroad, bears S.11°55'E., 3.33 chs. dist.  
Land, sloping south.  
Soil, sandy, 2nd. rate.  
No timber.  
Undergrowth, greasewood.  
Land covered with dense undergrowth on 80.00 chs.
-

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- S.89°55'E., on a random line, bet. secs. 15 and 22.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.96 Intersect N. and S. line, 5 lks. S. of the cor. of secs. 14-15-22 and 23.
- Thence I run
- N.89°57'W., on a true line,  
Bet. secs. 15 and 22.
- Descend over mountainous land.
- 13.50 Hollow, 75 ft. deep, course SW.
- Ascend.
- 37.00 Begin abrupt ascent, bears NE. and SW.
- 39.98 Set a sandstone, 12x12x8 ins., 8 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.
- 43.50 Spur, projects SW.
- Descend.
- 50.00 Foot of descent, bears NE. and SW.
- Over level land, through dense undergrowth.
- 78.43 Telegraph line, bears N. 9°15'E. and S. 9°15'W.
- 78.88 Middle of track of the Sunnyside branch of the Denver and Rio Grande Railroad, bears N. 9°15'E. and S. 9°15'W.
- 79.96 The cor. of secs. 15-16-21 and 22.
- Land, mountainous and level.
- Soil, rocky and clay, 3rd. rate ; loam, 1st. rate.
- No timber.
- Undergrowth, greasewood.
- Land covered with dense undergrowth on 79.96 chs.
- 
- N. 0°01'W., bet. secs. 15 and 16.
- Gradual ascent through dense undergrowth.
- 40.00 Set a sandstone, 24x9x8 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 80.00 Set a sandstone, 15x8x6 ins., 10 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.
- Land, sloping south.
- Soil, loam, 1st. rate.
- No timber.
- Undergrowth, greasewood.
- Land covered with dense undergrowth on 80.00 chs.
- June 12: At this cor. I set off  $23^{\circ}11'N.$ , on decl. arc, and at 12 M., l.m.t., observe the sun on the meridian the resulting lat. is  $39^{\circ}31'N.$
- 
- $S.89^{\circ}57'E.$ , on a random line, bet. secs. 10 and 15.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.94 Intersect N. and S. line, 14 lks. N. of the cor. of secs. 10-11-14 and 15.
- Thence I run
- $N.89^{\circ}51'W.$ , on a true line,
- Bet. secs. 10 and 15.
- Descend gradually over rolling land, through dense undergrowth.
- 27.81 Telegraph line, bears  $N.46^{\circ}47'E.$  and  $S.46^{\circ}47'W.$
- 28.66 Middle of track of the Sunnyside branch of the Denver and Rio Grande Railroad, bears  $N.46^{\circ}47'E.$  and  $S.46^{\circ}47'W.$
- 39.97 Set a sandstone, 14x12x8 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- 79.94 The cor. of secs. 9-10-15 and 16.
- Land, rolling.

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS

Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 79.94 chs.

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N.0°01'W., bet. secs. 9 and 10.

Ascend over rolling land, through dense undergrowth.  
25.62 Enter Cottonwood Wash, 30 ft. deep, course SW.  
39.50 Bottom of wash, course SW.  
40.00 Set a sandstone, 16x12x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.  
45.00 Leave wash.  
80.00 Set a sandstone, 16x12x4 ins., 11 ins. in the ground, for cor. of secs. 3-4-9 and 10, marked with 5 notches on S. and 3 notches on E. edges, dig pits, 18x18x12 ins., in each sec., 5 $\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.  
Land, rolling.  
Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 80.00 chs.

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S.89°51'E., on a random line, bet. secs. 3 and 10.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.  
80.02 Intersect N. and S. line, 12 lks. S. of the cor. of secs. 2-3-10 and 11.  
Thence I run  
N.89°56'W., on a true line,  
Bet. secs. 3 and 10.  
Descend over rolling land, through dense undergrowth.  
27.50 Wash, 70 lks. wide, 15 ft. deep, course SW.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 38.00 Knoll on line, bears NE. 10.00 chs. and SW., 10.00 chs.
- 40.01 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 80.02 The cor. of secs. 3-4-9 and 10.  
Land, rolling.  
Soil, loam, 1st. rate.  
No timber.  
Undergrowth, greasewood and sage..  
Land covered with dense undergrowth on 80.02 chs.
- 
- Knowing the line bet. secs. 3 and 4 will not close within limits on the N. bdy. of the Tp., I run  
N. 0° 01' W., on a true line,  
Bet. secs. 3 and 4.  
Gradual ascent over rolling land.
- 10.75 Wash, 50 lks. wide, 5 ft. deep, course SW.
- 14.35 Road from Price to Sunnyside, bears E. and W.
- 40.00 Set a sandstone, 14x12x9 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- 80.30 Intersect N. bdy. of Tp., 1.05 chs. ~~N. 82° 30' W.~~ of the cor. of secs. 3-4-33 and 34, heretofore described.  
Set a sandstone, 20x8x6 ins., 15 ins. in the ground, for closing cor. of secs. 3 and 4, marked CC on S., with 3 grooves on E. and W. faces, dig pits, 24x18x12 ins., crosswise on each line, E. and W. 3 ft. and S. of stone 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S. of cor.  
I destroy all marks on the cor. of secs. 3-4-33 and 34, that pertain to T. 15 S.  
Land, rolling.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Soil, loam, 1st. rate.

No timber.

June 12, 1908

June 13: At 7 a.m., l.m.t., I set off  $39^{\circ}28'N.$ , on lat. arc,  $23^{\circ}14'N.$ , on decl. arc, and determine a meridian with the solar, at the standard cor. of secs. 32 and 33, heretofore described.

Thence I run

$N.0^{\circ}02'W.$ , bet. secs. 32 and 33.

Ascend over rocky and mountainous land.

1.25 Ridge, bears E. and W.

Descend.

21.25 Hollow, 75 ft. deep, course NE.

Ascend.

24.00 Spur, projects NE.

Descend.

28.00 Hollow, 50 ft. deep, course NE.

Ascend.

33.00 Ridge, bears NE. and SW.

Descend over broken clay hills.

40.00 Set a sandstone,  $18 \times 10 \times 4$  ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

80.00 Set a sandstone,  $14 \times 12 \times 8$  ins., 10 ins. in the ground, for cor. of secs. 28-29-32 and 33, marked with 1 notch on S. and 4 notches on E. edges, dig pits,  $18 \times 18 \times 12$  ins., in each sec.,  $5\frac{1}{2}$  ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, W. of cor.

Land, mountainous.

Soil, rocky and clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- East, on a random line, bet. secs. 28 and 33.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.92 Intersect N. and S. line, 10 lks. S. of the cor. of secs. 27-28-33 and 34.
- Thence I run  $\checkmark$   
S.  $89^{\circ}56'W.$ , on a true line,  
Bet. secs. 28 and 33.
- Gradual ascent through dense undergrowth.
- 20.00 Begin ascent over mountainous land, bears N. and S.
- 39.96 Spur, projects NE.
- Set a sandstone, 16x12x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.
- Pits impracticable.  
Descend.
- 55.50 Hollow, 75 ft. deep, course NE.
- Ascend.
- 79.92 The cor. of secs. 28-29-32 and 33.
- Land, rolling and mountainous.
- Soil, sandy, 2nd. rate ; clay, 3rd. rate.
- No timber.
- Undergrowth, greasewood.
- Land covered with dense undergrowth or mountainous land on 79.92 chs.
- 
- N.  $0^{\circ}02'W.$ , bet. secs. 28 and 29.
- Descend over mountainous land.
- 24.00 Foot of descent, bears NW. and SE.
- Over nearly level land.
- 27.00 Wash, 50 lks. wide, 5 ft. deep, course SE.
- 40.00 Set a sandstone 16x8x4 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 64.50 Wash, 30 lks. wide, 3 ft. deep, course SE.  
Begin ascent.
- 80.00 Set a limestone, 18x16x3 ins., 12 ins. in the ground, for  
<sup>24</sup>  
<sub>56</sub> cor. of secs. 20-21-28 and 29, marked with 2 notches on S.  
and 4 notches on E. edges, dig pits, 18x18x12 ins., in each  
sec., 5½ ft. dist., and raise a mound of earth, 4 ft. base,  
2 ft. high, W. of cor.  
Land, mountainous and nearly level.  
Soil, clay, 3rd. rate.  
No timber.  
Mountainous land on 24.00 chs.
- 
- N. 89°56'E., on a random line, bet. secs. 21 and 28.
- 40.00 Set temp. ¼ sec. cor.
- 79.96 Intersect N. and S. line, 3 lks. N. of the cor. of secs.  
21-22-27 and 28.  
Thence I run  
S. 89°57'W., on a true line,  
bet. secs. 21 and 28.  
Gradual descent through dense undergrowth.
- 19.50 Cottonwood Wash, 2.00 chs. wide, 20 ft. deep, course SE.  
Gradual ascent. Leave dense undergrowth.
- 26.00 Begin abrupt ascent, bears NW. and SE.
- 30.00 Ridge, bears NW. and SE.  
Descend.
- 39.98 Hollow, 50 ft. deep, course SE.  
Set a sandstone, 14x8x6 ins., 10 ins. in the ground, for ¼  
sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E.  
and W. of stone, 3 ft. dist., and raise a mound of earth, 3½  
ft. base, 1½ ft. high, N. of cor.  
Ascend.
- 61.50 Ridge, bears NW. and SE.  
Descend.
- 79.96 The cor. of secs. 20-21-28 and 29.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Land, rolling and mountainous.

Soil, sandy, 2nd. rate : clay, 3rd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land on 79.96 chs.

June 13 : At this cor. I set off  $23^{\circ}14'N.$ , on decl. arc, and at 12 M., l.m.t., observe the sun on the meridian, the resulting lat. is  $39^{\circ}30'N.$

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N.  $0^{\circ}02'W.$ , bet. secs. 20 and 21.

Ascend over mountainous land.

21.00 Ridge, bears NW. and SE.

Descend.

25.50 Hollow, 75 ft. deep, course SE.

Ascend.

35.00 Spur, projects E.

Descend.

40.00 Hollow, 60 ft. deep, course SE.

Set a limestone, 16x14x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Ascend.

62.00 Ridge, bears NW. and SE.

Descend.

66.50 Hollow, 75 ft. deep, course SE.

Ascend.

77.50 Ridge, bears NW. and SE.

Descend.

80.00 Set a limestone, 22x8x4 ins., 16 ins. in the ground, for cor. of secs. 16-17-20 and 21, marked with 3 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Pits impracticable.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

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N. 89° 57' E., on a random line, bet. secs. 16 and 21.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.00 Intersect N. and S. line, 7 lks. S. of the cor. of secs.  
15-16-21 and 22.

Thence I run

S. 89° 54' W., on a true line,

Bet. secs. 16 and 21.

Over level land, through dense undergrowth.

23.50 Cottonwood Wash, 2.00 chs. wide, 20 ft. deep, course S.

40.00 Set a limestone, 16x8x4 ins., 11 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2  
ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

43.00 Begin ascent over mountainous land, bearing N. and S.  
Leave dense undergrowth.

54.00 Spur, projects SE.

Descend.

56.25 Hollow, 50 ft. deep, course SE.

Ascend.

59.50 Spur, projects SE.

Descend.

66.75 Hollow, 75 ft. deep, course SE.

Ascend.

80.00 The cor. of secs. 16-17-20 and 21.

Land, level and mountainous.

Soil, sandy, 2nd. rate ; clay, 3rd. rate.

No timber.

Undergrowth, greasewood.

Land covered with dense undergrowth or mountainous land  
on 80.00 chs.

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## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

N.0°02'W., bet. secs. 16 and 17.

Descend over mountainous land.

8.00 Hollow, 75 ft. deep, course SE.

Ascend.

33.30 Ridge, bears NW. and SE.

Descend.

40.00 Set a limestone, 18x14x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{2}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

40.35 Hollow, 50 ft. deep, course E.

Ascend.

44.50 Spur, projects NW.

Descend.

64.00 Hollow, 75 ft. deep, course NE.

Ascend.

70.00 Spur, projects NE.

Descend.

73.50 Hollow, 75 ft. deep, course NE.

Ascend.

78.50 Spur, projects E.

Descend.

80.00 Set a sandstone, 16x8x6 ins., 11 ins. in the ground, for cor. of secs. 8-9-16 and 17, marked with 4 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land mountainous.

Soil, rocky and clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

## SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS	
	N.89°54'E., on a random line, bet. secs. 9 and 16.
40.00	Set temp. $\frac{1}{4}$ sec. cor.
80.04	Intersect N. and S. line, 3 lks. S. of the cor. of secs. 9-10-15 and 16.
	Thence I run S.89°53'W., on a true line, Bet. secs. 9 and 16.
	Gradual descent over rolling land, through dense undergrowth.
22.55	Cottonwood Wash, 2.00 chs. wide, 20 ft. deep, course S. Gradual ascent.
40.02	Set a sandstone, 16x9x6 lins., 11 ins. in the ground, for $\frac{1}{4}$ sec. cor., marked $\frac{1}{4}$ on N. face, dig pits, 18x18x12 ins., E. and W. of stone 3 ft. dist., and raise a mound of earth, 3 $\frac{1}{2}$ ft. base, 1 $\frac{1}{2}$ ft. high, N. of cor.
	Ascend over mountainous land, bears N. and S. Leave dense undergrowth.
47.55	Spur, projects SE. Descend.
54.05	Hollow, 50 ft. deep, course S. Ascend.
63.05	Spur, projects S. Descend.
64.80	Hollow, 50 ft. deep, course S. Ascend.
68.00	Spur, projects S. Descend.
72.00	Hollow, 75 ft. deep, course SE. Ascend.
80.04	The cor. of secs. 8-9-16 and 17. Land, rolling and mountainous. Soil, sandy, 2nd. rate ; clay, 3rd. rate. No timber. Undergrowth, greasewood. Land covered with dense undergrowth or mountainous

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS

land on 80.04 chs.

June 13, 1908.

June 14: At 7 a.m., l.m.t., I set off  $39^{\circ}31'N.$ , on lat. arc,  $23^{\circ}17'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 8-9-16 and 17.

Thence I run

$N.0^{\circ}02'W.$ , bet. secs. 8 and 9.

Descend over mountainous land.

5.50 Hollow, 75 ft. deep, course SE.

Ascend.

14.00 Ridge, bears NW. and SE.

Descend over rolling land.

40.00 Set a limestone,  $24 \times 14 \times 4$  ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

66.50 Hollow, 60 ft. deep, course SE.

Ascend.

80.00 Set a sandstone,  $16 \times 14 \times 4$  ins., 11 ins. in the ground, for cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and 4 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

$\frac{14}{26}$

Pits impracticable.

Land, mountainous and rolling.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 14.00 chs.

$N.89^{\circ}53'E.$ , on a random line, bet. secs. 4 and 9.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 15 lks. N. of the cor. of secs. 3-4-9 and 10.

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS

Thence I run

S.89°59'W., on a true line,

Bet. secs. 4 and 9.

Gradual descent through dense undergrowth.

7.50 Wash, 50 lks. wide, 4 ft. deep, course SW.

38.50 Wash, 1.00 ch. wide, 10 ft. deep, course SE.

Gradual ascent.

40.01 Set a sandstone, 14x8x5 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

Leave dense undergrowth.

75.00 Ridge, bears NW. and SE.

Descend.

80.02 The cor. of secs. 4-5-8 and 9.

Land, rolling.

Soil, sandy, 2nd. rate ; clay, 3rd. rate.

No timber.

Undergrowth, greasewood .

Land covered with dense undergrowth on 40.01 chs.

Knowing the line bet. secs. 4 and 5 will not close within limits on the N. bdy. of the Tp.,

I run

N.0°02'W., on a true line,

Bet. secs. 4 and 5.

Ascend.

9.50 Ridge, bears NW. and SE.

Descend.

26.10 Road, from Price to Sunnyside, bears NW. and SE.

40.00 Set a sandstone, 16x8x7 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 5 ft. dist., and raise a mound of earth, 5 $\frac{1}{2}$  ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 59.20 Wash, 40 lks. wide, 8 ft. deep, course SW.  
Enter dense undergrowth.  
Begin gradual ascent.
- 60.70 Wash, 40 lks. wide, 8 ft. deep, course SE.
- 80.64 Intersect N. bdy. of Tp., 95 lks. N.  $89^{\circ}55'W.$ , of the cor. of  
secs. 4-5-32 and 33, heretofore described.  
Set a sandstone, 16x12x8 ins., 11 ins. in the ground, for  
closing cor. of secs. 4 and 5, marked CC on S., with 4 grooves  
on E. and 2 grooves on W. faces, dig pits, 24x18x12 ins.,  
crosswise on each line, E. and W. 3 ft. and S. of stone, 7 ft.  
dist., and raise a mound of earth, 4 ft. base, 2 ft. high, S.  
of cor.  
Land, rolling.  
Soil, clay, 3rd. rate : loam, 1st rate.  
No timber.  
Undergrowth, greasewood and sage.  
Land covered with dense undergrowth on 21.44 chs.  
June 14 : At this cor. I set off  $23^{\circ}17'N.$ , on decl. arc,  
and at 12 M., l.m.t., observe the sun on the meridian, the  
resulting lat. is  $39^{\circ}33'N.$
- 
- From the standard cor. of secs. 31 and 32, heretofore  
described, I run  
 $N.0^{\circ}03'W.$ , bet. secs. 31 and 32.  
Ascend over rocky and mountainous land.
- 10.50 Begin abrupt ascent, bears NW. and SE.
- 21.00 Spur, projects W.  
Abrupt descent.
- 25.50 Hollow, 100 ft. deep, course W.  
Abrupt descent.
- 31.50 Ridge, bears NW. and SE.  
Descend.
- 40.00 Set a sandstone, 16x14x5 ins., 11 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

80.00 Set a limestone, 36x6x6 ins., 27 ins. in the ground, for cor. of secs. 29-30-31 and 32, marked with 1 notch on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. rate : clay, 2nd. rate.

No timber.

Mountainous land on 80.00 chs.

---

East, on a random line, bet. secs. 29 and 32.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 7 lks. N. of the cor. of secs. 28-29, 32 and 33.

Thence I run

N.  $89^{\circ}57'W.$ , on a true line,

Bet. secs. 29 and 32.

Ascend over mountainous land along north slope.

40.01 Set a limestone, 18x14x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

80.02 The cor. of secs. 29-30-31 and 32.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.02 chs.

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## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Knowing the line bet. secs. 30 and 31 will not close within limits on the W. bdy. of the Tp., I run

West, on a true line,

Bet. secs. 30 and 31.

Ascend over mountainous land.

40.00 Set a limestone, 16x8x7 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

77.50 Ridge, bears NW. and SE.

Abrupt descent.

81.18 Intersect W. bdy. of Tp., 2.26 chs. N. of the cor. of secs. 25-30-31 and 36, heretofore described.

Set a limestone, 16x16x8 ins., 11 ins. in the ground, for closing cor. of secs. 30 and 31, marked CC on E. with 1 groove on S. and 5 grooves on N. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, E. of cor.

Pits impracticable.

I destroy all marks on the cor. of secs. 25-30-31 and 36, which pertain to R. 12 E.

Land, mountainous.

Soil, clay or rocky, 3rd. rate.

No timber.

Mountainous land on 81.18 chs.

June 14, 1908

June 15: At 7 a.m., l.m.t., I set off 39°29'N., on lat. arc, 23°20'N. on decl. arc, and determine a meridian with the solar at the cor. of secs. 29-30-31 and 32.

Thence I run

N. 0°03'W., bet. secs. 29 and 30.

Descend over rolling land.

40.00 Set a limestone, 18x14x6 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone,

## SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS	
	2 ft. base, 1½ ft. high, W. of cor. Pits impracticable.
46.00	Wash, 50 lks. wide, 4 ft. deep, in hollow, 75 ft. deep, course E. Ascend.
80.00	Set a limestone, 16x8x6 ins., 11 ins. in the ground, for cor. of secs. 19-20-29 and 30, marked with 2 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base, 1½ ft. high, W. of cor. Pits impracticable. Land, rolling. Soil, clay, 3rd. rate. No timber.
	—————
	S. 89°57'E., on a random line, bet. secs. 20 and 29.
40.00	Set temp. ¼ sec. cor.
79.98	Intersect N. and S. line, 3 lks. N. of the cor. of secs. 20-21-28 and 29. Thence I run N. 89°56'W., on a true line, Bet. secs. 20 and 29. Ascend over mountainous land.
9.85	Wash, 1.00 ch. wide, 12 ft. deep, course SE.
26.25	Wash, 50 lks. wide, 5 ft. deep, course SE.
36.50	Spur, projects SE. Descend.
39.99	Hollow, 50 ft. deep, course SE. Set a limestone, 16x12x4 ins., 11 ins. in the ground, for ¼ sec. cor., marked ¼ on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth, 3½ ft. base, 1½ ft. high, N. of cor. Ascend.
49.00	Spur, projects SE. Descend.
66.00	Wash, 1.00 ch. wide, 4 ft. deep, course SE.

SUBDIVISIONS BY T. 13 S., R. 13 E.

CHAINS

Gradual ascent.

29.00 The cor. of sects. 19-20-29 and 30.

Land mountainous and rolling.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 49.00 chs.

Knowing the line bet. sects. 19 and 30 will not close within limits on the E. bdy. of the Tp., I run West, on a true line, bet. sects. 19 and 30.

Ascend over mountainous land.

40.00 Set a limestone, 14x12x5 ins., 10 ins. in the ground, for 4 sec. cor., marked 4 on N. face, and raise a mound of stone, 2 ft. base, 1 1/2 ft. high, N. of cor.

Pite impracticable.

44.00 Ridge, bears N. and S.

Descend.

50.75 Hollow, 50 ft. deep, course N.

Ascend.

55.00 Spur, projects N.

Descend.

72.00 Hollow, 80 ft. deep, course N.

Ascend.

77.00 Spur, projects N.

Descend.

80.00 Hollow, 60 ft. deep, course N.

Ascend.

81.15 Intersect E. bdy. of Tp., 1.64 chs. N. 0°00' W., of the cor. of sects. 19-24-25 and 30, heretofore described.

Set a limestone, 14x12x5 ins., 10 ins. in the ground, for closing cor. of sects. 19 and 30, marked 00 on N. with 2 grooves on 3, and 4 grooves on N. face, and raise a mound

SUBDIVISIONS OF T.15 S., R.12 E.

CHAINS

of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, E. of cor.

Pits impracticable. I destroy all marks on the cor. of secs. 19-24-25 and 30, pertaining to R.12 E. Land, mountainous.

Soil, clay and rocky, 3rd. rate.

No timber.

Mountainous land on 81.02 chs.

---

N.  $0^{\circ}03'$  W., bet. secs. 19 and 20.

Ascend over rolling land.

40.00 Set a limestone, 24x12x3 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

41.25 Ridge, bears NW. and SE.

Descend.

59.00 Hollow, 75 ft. deep, course SE.

Ascend.

80.00 Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for cor. of secs. 17-18-19 and 20, marked with 3 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, rolling.

Soil, clay, 3rd. rate.

No timber.

June 15 : At this cor. I set off  $23^{\circ}20'$  N., on decl. arc, and at 12 M., l.m.t., observe the sun on the meridian, the resulting lat. is  $39^{\circ}30'$  N.

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S.  $89^{\circ}56'$  W., on a random line, bet. secs. 17 and 20.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.02 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 16-17-20 and 21.

Thence I run

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

✓  
N.89°59'W., on a true line,

Bet. secs. 17 and 20.

Ascend over mountainous land.

1.20 Ridge, bears NW. and SE.

Descend.

17.00 Hollow, 75 ft. deep, course SE.

Ascend.

33.00 Ridge, bears NW. and SE.

Descend along south slope.

40.01 Set a limestone, 24x14x3 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

80.02 The cor. of secs. 17-18-19 and 20.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.02 chs.

---

Knowing the line bet. secs. 18 and 19 will not close within limits on the W. bdy. of the Tp., I run

Westly on a true line,

Bet. secs. 18 and 19.

Descend over mountainous land.

24.00 Hollow, 75 ft. deep, course SE.

Ascend.

40.00 Set a sandstone, 18x10x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

44.50 Ridge, bears NW. and SE.

Abrupt descent.

46.25 Hollow, 100 ft. deep, course NW.

Abrupt ascent.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 52.50 Spur, projects NW.  
Abrupt descent.
- 73.00 Foot of abrupt descent, bears N. and S.  
Descend over broken land.
- 81.20 Intersect W. bdy. of Tp., 1.10 chs., North, of the cor. of secs. 13-18-19 and 24, heretofore described.  
Set a sandstone, 18x12x6 ins., 12 ins. in the ground, for closing cor. of secs. 18 and 19, marked CC on E., with 3 grooves on N. and S. faces, dig pits, 24x18x12 ins., crosswise on each line, N. and S., 3 ft. and E. of stone, 7 ft. dist., and raise a mound of earth, 4 ft. base, 2 ft. high, E. of cor. I destroy all marks on the cor. of secs. 13-18-19 and 24 that pertain to R. 12 E.  
Land, mountainous.  
Soil, clay, 3rd. rate.  
No timber.  
Mountainous land on 81.20 chs.
- 
- N. 0° 03' W., bet. secs. 17 and 18.
- Ascend over mountainous land.
- 4.50 Ridge, bears NW. and SE.  
Descend.
- 20.50 Hollow, 75 ft. deep, course SE.  
Ascend.
- 26.50 Spur, projects SE.  
Descend.
- 40.00 Set a sandstone, 18x12x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, dig pits, 18x18x12 ins., N. and S. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 45.50 Hollow, 75 ft. deep, course SE.  
Ascend.
- 60.00 Ridge, bears E. and W.  
Descend.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

80.00 Hollow, 75 ft. deep, course NW.

Set a limestone, 16x10x7 ins., 11 ins. in the ground, for cor. of secs. 7-8-17 and 18, marked with 4 notches on S. and 5 notches on E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

June 15, 1908

June 16 : At 7 a.m., l.m.t., I set off  $39^{\circ}31'N.$ , on lat. arc,  $23^{\circ}23'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 7-8-17 and 18.

Thence I run

S.  $89^{\circ}59'E.$ , on a random line, bet. secs. 8 and 17.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.04 Intersect N. and S. line, 5 lks. N. of the cor. of secs. 8-9-16 and 17.

Thence I run

N.  $89^{\circ}57'W.$ , on a true line,

Bet. secs. 8 and 17.

Ascend over mountainous land.

28.00 Spur, projects NE.

Descend.

40.02 Hollow, 75 ft. deep, course NE.

Set a limestone, 24x6x4 ins., 18 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Ascend.

72.50 Spur, projects NE.

Descend.

## SUBDIVISIONS OF T. 15 S., R. 12 E.

## CHAINS

80.04 The cor. of sec. 7-8-17 and 18, in bottom of hollow,  
course NW.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.04 chn.

Knowing the line bet. sec. 7 and 18 will not close within  
limits on the E. bdy. of the Tp., I run

West, on a true line,

bet. sec. 7 and 18'

Ascend over mountainous land.

11.50 Spur, projects N.

Descend.

15.50 Hollow, 75 ft. deep, course NE.

Ascend.

37.00 Spur, projects N.

Descend.

40.50 Set a sandstone, 18x18x5 ins., 12 ins. in the ground, for  
sec. cor., marked 5 on N. face, and raise a round of stone,  
2 ft. diam., 1 1/2 ft. high, N. of cor.

Pile impracticable.

40.75 Hollow, 75 ft. deep, course SE.

Ascend.

69.00 Ridge, bet. NW. and SE.

Descend.

66.00 Hollow, 60 ft. deep, course NW.

Ascend.

60.75 Spur, projects NW.

Descend.

80.85 Intersect W. bdy. of Tp., 70 lkn., N. 0° 06' W., from the cor.  
of sec. 7-12-13 and 18, heretofore described.

Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for  
closing cor. of sec. 7 and 18, marked 66 on N., with 4  
grooves on S. and 2 grooves

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

on N. faces, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, E. of cor.

Pits impracticable.

I destroy all marks on the cor. of secs. 7-12-13 and 18, that pertain to R.12 E.

Land, mountainous.

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.85 chs.

N.  $0^{\circ}03'W.$ , bet. secs. 7 and 8.

Ascend over mountainous land.

7.00 Spur, projects NW.

Descend.

13.00 Hollow, 75 ft. deep, course NE.

Ascend.

26.00 Spur, projects SE.

Descend.

39.65 Hollow, 75 ft. deep, course SE.

Ascend.

40.00 Set a limestone, 15x12x4 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

60.00 Spur, projects NE.

Descend.

71.00 Hollow, 75 ft. deep, course SE.

Ascend.

80.00 Set a limestone, 18x12x4 ins., 12 ins. in the ground, for cor. of secs. 5-6-7 and 8, marked with 5 notches on S. and E. edges, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, E. of cor.

Pits impracticable.

Land, mountainous.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

Soil, clay, 3rd. rate.

No timber.

Mountainous land on 80.00 chs.

June 16 : At this cor. I set off  $23^{\circ}22'N.$ , on decl. arc,  
and at 12 M., l.m.t., observe the sun on the meridian, the  
resulting lat. is  $39^{\circ}32'N.$

---

S.  $89^{\circ}57'E.$ , on a random line, bet. secs. 5 and 8.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.06 Intersect N. and S. line, 5 lks. S. of the cor. of secs.  
4-5-8 and 9.

Thence I run

N.  $89^{\circ}59'W.$ , on a true line,

Bet. secs. 5 and 8.

Descend over rolling land.

30.00 Hollow, 50 ft. deep, course SE.

Ascend.

40.03 Set a limestone, 24x12x5 ins., 18 ins. in the ground, for  $\frac{1}{4}$   
sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone,  
2 ft. base,  $1\frac{1}{2}$  ft. high, N. of cor.

Pits impracticable.

80.06 The cor. of secs. 5-6-7 and 8.

Land, rolling.

Soil, clay, 3rd. rate.

No timber.

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West, on a random line, bet. secs. 6 and 7.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

80.99 Intersect W. bdy. of Tp., 29 lks. N. of the cor. of secs.  
1-6-7 and 12, heretofore described.

Thence I run

N.  $89^{\circ}48'E.$ , on a true line,

Bet. secs. 6 and 7.

Descend over mountainous land, through scattering timber.

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

- 4.68 Hollow, 60 ft. deep, course NW.  
Ascend.
- 7.71 Ridge, bears NE. and SW.  
Leave timber.  
Descend.
- 40.99 Set a limestone, 20x12x4 ins., 15 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, dig pits, 18x18x12 ins., E. and W. of stone, 3 ft. dist., and raise a mound of earth,  $3\frac{1}{2}$  ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.
- 68.43 Hollow, 100 ft. deep, course SE.  
Abrupt ascent.
- 70.95 Spur, projects SE.  
Descend.
- 80.99 The cor. of secs. 5-6-7 and 8.  
Land, mountainous.  
Soil, rocky and clay, 3rd. rate.  
Timber, cedar and pinon.  
Mountainous land on 80.99 chs.
- 
- Knowing the line bet. secs. 5 and 6 will not close within limits on the N. bdy. of the Tp., I run  
N. 0° 03' W., on a true line,  
Bet. secs. 5 and 6.  
Ascend over mountainous land.
- 2.30 Spur, projects SE.  
Descend.
- 12.00 Hollow, 70 ft. deep, course SE.  
Ascend.
- 21.75 Road from Price to Sunnyside, bears NW. and SE., on top of spur, projects SE.  
Descend.
- 30.00 Enter scattering timber.
- 40.00 Set a limestone, 18x12x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

## SUBDIVISIONS OF T.15 S., R.12 E.

## CHAINS

A cedar, 8 ins. diam. bears N. 49° 30' E., 29 lks. dist.,  
marked  $\frac{1}{4}$  S 5 BT.

No other trees within limits, and raise a mound of stone,  
2 ft. base, 1½ ft. high, W. of cor.

Pits impracticable.

41.00 Leave timber.

62.50 Hollow, 50 ft. deep, course NE.

Ascend.

78.00 Ridge, bears E. and W.

Descend.

80.62 Intersect N. bdy. of Tp., 96 lks. N. 89° 55' W., on the cor. of  
secs. 5-6-31 and 32, heretofore described.

Set a limestone, 24x16x3 ins., 18 ins. in the ground, for  
closing cor. of secs. 5 and 6, marked CC on S., with 5 grooves  
on E. and 1 groove on W. face, and raise a mound of stone,  
2 ft. base, 1½ ft. high, S. of cor.

Pits impracticable.

I destroy all marks on the cor. of secs. 5-6-31 and 32,  
that pertain to T. 15 S.

Land, mountainous.

Soil, clay, 3rd. rate.

Timber, cedar and pinon.

Mountainous land on 80.62 chs.

June 16, 1908.

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GENERAL DESCRIPTION.

This township is mountainous in the western and  
southern portion the soil of which is clay or rocky  
and covered with sparse undergrowth while the balance  
of the township is rolling and level the soil being  
loam and capable of producing crops with irrigation.  
A scattering growth of cedar and pinon timber is found  
in the northwestern portion of the township and a

## GENERAL DESCRIPTION OF T.15 S., R.12 E.

scattering growth of cottonwood trees are found along Cottonwood Wash, with a dense growth of undergrowth on the level and rolling portions of the township. There is no surface water on this township, the irrigating ditch mentioned on the E. bdy. of sec. 1, in these notes was dry at the time of survey.

The only water in the township is a well in the NE  $\frac{1}{4}$  sec. 12, belonging to C.H. Miller.

There are four settlers in this township, viz:

William McMillian and George Hill, in the S  $\frac{1}{2}$  sec. 1,

Acres of land under cultivation, 15.

Value of improvements, \$800.00

R.M. Gailbraith, in N E  $\frac{1}{4}$  sec. 2

Acres of land under cultivation, 20.

Value of improvements, \$1000.00

C.H. Miller, in N E  $\frac{1}{4}$  sec. 12,

Acres of land under cultivation, 20.

Value of improvements, \$1200.00

No improvements were found in the NW  $\frac{1}{4}$  SW  $\frac{1}{4}$  sec. 13, on Desert Entry No. 2549, George W. Richmond.

There are no indications of mineral found in this township.

*J. J. Hunt*  
U. S. Deputy, Surveyor.

FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by Harvey D. Heist, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of Subdivisions of T.15 S., R.12 E. of the Salt Lake Base and Meridian, Utah, showing the respective capacities in which they acted:

- Manderson W. Houghton, Chairman.
Walter A. Stumm, Chairman.
Earl Woolley, Moundman.
Homer Petty, Moundman.
Claude L. Heist, Axman.
Charlie Stumm, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted Harvey D. Heist, United States Deputy Surveyor, in surveying all those parts or portions of the Subdivisions of T.15 S., R.12 E.

of the Salt Lake Base and meridian, in the state of Utah, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Utah

- Manderson W. Houghton, Chairman.
Walter A. Stumm, Chairman.
Earl Woolley, Moundman.
Homer Petty, Moundman.
Claude L. Heist, Axman.
Charlie Stumm, Flagman.

Subscribed and sworn to before me this 16th day of June, 1908

Harvey D. Heist

U.S. Deputy Surveyor



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, Harvey D. Heist, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from Thomas Hull, United States Surveyor General for Utah, bearing date of 21st day of March, 1907, I have well, faithfully, and truly, in my proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for Utah, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of SUBDIVISIONS OF T.15 S., R.12 E.

of the Salt Lake Base and          meridian, in the State of Utah, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for Utah and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

*Harvey D. Heist*  
United States Deputy Surveyor

Subscribed by said Harvey D. Heist, and sworn to before me, this 12th day of October, 1908.

*Thomas Hull*  
U. S. Surveyor-General



For Utah.

APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, 1908

The foregoing field notes of the survey of the subdivisional lines of Township No. 15 South, Range No. 12 East of the Salt Lake Base and Meridian, Utah

executed by Harvey D. Heist and Job H. Winwood under ~~the~~ contract No. 298, dated March 21, 1907, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

*Thomas Hull*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in         , has been correctly copied from the original notes on file in this office.

United States Surveyor General

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4-070.

Expd  
G.N.

" Q "

BOOK A-349

FILED  
DEC 23 1908  
*[Signature]*

# FIELD NOTES

OF THE SURVEY OF THE

S.S.P.

SUBDIVISIONS

of

Fractional, Township No. 14 South,

Range No. 14 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heint and Job H. Winwood United States Deputy Surveyors

Under ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced June 17, 1908

Survey completed June 21, 1908

6-121

*high 10-78-96*

## NAMES AND DUTIES OF ASSISTANTS.

Henderson W. Houghton, Chairman

Walter A. Stumm, "

Earl Woolley, Houndman

Homer Petty, Axman

Claude B. Heist, "

Charlie Stumm, Flagman

BOOK A-349

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Township 14 South, Range 14 East,

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Meanders Page.....

PRELIMINARY OATHS OF ASSISTANTS.

WE, Manderson W. Houghton and Walter A. Stumm, do solemnly swear that we will well and faithfully execute the duties of chainmen; that we will level the chain upon even and uneven ground, and plumb the tally pins, either by sticking or dropping the same; that we will report the true distances to all notable objects, and the true lengths of all lines that we assist in measuring, to the best of our skill and ability, and in accordance with instructions given us, in the survey of Subdivisions of fracl. T. 14 S., R. 14 E., Ts. 13 & 14 S., R. 16 E., & T. 13 S., R. 15 E., S. L. B. & M., in the state of Utah.

Manderson W. Houghton, Chainman  
Walter A. Stumm, Chainman

Subscribed and sworn to before me this 17th day of June, 1908



Jawey D. First  
U. S. Deputy Surveyor

WE, Earl Woolley, and Claude L. Heist, do solemnly swear that we will well and truly perform the duties of moundmen in the establishment of corners, according to the instructions given us, to the best of our skill and ability, in the survey of Subdivisions of fracl. T. 14 S., R. 14 E., Ts. 13 & 14 S., R. 16 E. & T. 13 S., R. 15 E., S. L. B. & M., in the state of Utah.

Earl Woolley, Moundman  
Claude L. Heist, Moundman

Subscribed and sworn to before me this 17th day of June, 1908



Jawey D. First  
U. S. Deputy Surveyor.

WE, Claude L. Heist, and Earl Woolley do solemnly swear that we will well and truly perform the duties of axmen in the establishment of corners and other duties, according to instructions given us, to the best of our skill and ability, in the survey of Subdivisions of fracl. T. 14 S., R. 14 E., Ts. 13 and 14 S., R. 16 E. & T. 13 S., R. 15 E., S. L. B. & M., in the state of Utah.

Claude L. Heist, Axman  
Earl Woolley, Axman

Subscribed and sworn to before me this 17th day of June, 1908



Jawey D. First  
U. S. Deputy Surveyor

I, Charlie Stumm, do solemnly swear that I will well and truly perform the duties of flagman according to instructions given me, to the best of my skill and ability, in the survey of Subdivisions of fracl. T. 14 S., R. 14 E., T. 13 and 14 S., R. 16 E. & T. 13 S., R. 15 E., S. L. B. & M. in the state of Utah.

Charlie Stumm, Flagman

Subscribed and sworn to before me this 17th day of June, 1908



Jawey D. First  
U. S. Deputy Surveyor

## SUBDIVISIONS OF T.14 S., R.14 E.

Survey commenced, June 17, 1908 and executed with the instrument described in book "A", of this survey.

I examine the adjustments of the transit and correct the level and collimation errors, then, to test the solar apparatus by comparing its indications resulting from solar observations made during p.m. and a.m. hours with a meridian determined by observations of Polaris, I proceed as follows:

At the cor. of secs. 14-15-22 and 23, T.14 S., R. 14 E., which is a sandstone, 12x7x4 ins. above ground, marked and witnessed as described by the surveyor general, in approximate latitude  $39^{\circ}36'N.$ , longitude  $110^{\circ}22'W.$ , I set off  $39^{\circ}36'N.$ , on lat. arc,  $23^{\circ}25'N.$ , on decl. arc, and at 4h. 01m., p.m., l.m.t., determine with the solar a meridian and mark a point thereof, on a stone firmly set in the ground 5 chs. N. of the cor.

June 17, 1908.

June 18 : At 1h. 46m., a.m., l.m.t., I observe Polaris at eastern elongation, in accordance with Manual of Instructions, and mark a point in the line thus determined, on a peg driven in the ground, 5 chs. N. of my station.

At 6h. 30m., a.m., l.m.t., I lay off the azimuth of Polaris,  $1^{\circ}32'$  to the west, and mark the meridian thus determined, by cutting a small groove in the stone set last evening, on which the meridian falls 0.5 ins. west of the mark determined by the solar.

At 7h. 01m., a.m., l.m.t., I set off  $39^{\circ}36'N.$ , on lat. arc,  $23^{\circ}26'N.$ , on decl. arc, and mark a point in the meridian determined with the solar, by a cross on the stone already set 5 chs. N. of my station: this mark falls 0.5 ins. west of the meridian established by the Polaris observation.

The solar apparatus, by p.m. and a.m. observations, defines positions for meridians, respectively about  $0^{\circ}26'$  east and west of the meridian established by the Polaris

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

observations, therefore, I conclude that the adjustments of the instrument are satisfactory.

The magnetic bearing of the true meridian at 7h.30m., a.m. is  $N.16^{\circ}10'W.$ , the angle thus determined gives the mag. decl.  $16^{\circ}10'E.$

On account of the large amount of snow on the east slope of the Patmas Ridge, the elevation of which is about 10000 ft. above sea level, the cor. of secs. 13-14-23 and 24 is buried under 4 or 5 feet of snow and it is impossible run the line bet. secs. 13 and 14 on account of the broken character of the land and on account of the snow, which lies on the ground during the entire year.

I begin at the cor. of secs. 14-15-22 and 23, heretofore described and run

$N.0^{\circ}01'W.$ , bet. secs. 14 and 15.

Descend over mountainous land along steep east slope of Patmas Ridge, through heavy pine timber.

- 9.00 Leave pinr timber, bears E. and W.  
Enter scattering aspen timber.
- 29.00 Leave timber.
- 40.00 Set a limestone,  $15 \times 10 \times 6$  ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.  
Pits impracticable.
- 51.00 Hollow, 200 ft. deep, course E.  
Abrupt ascent along east slope, through scattering pine and aspen timber.
- 80.00 Set a sandstone,  $18 \times 10 \times 10$  ins., 12 ins. in the ground, for cor. of secs. 10-11-14 and 15, marked with 4 notches on S. and 2 notches on E. edges, from which
- An aspen, 5 ins. diam., bears  $N.27^{\circ}30'E.$ , 30 lks. dist., marked T 14 S R 14 E S 11 BT.
- A pine, 24 ins. diam., bears  $S.87^{\circ}E.$ , 60 lks. dist., marked T 14 S R 14 E S 14 BT.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

A pine 20 ins.diam., bears S.44°W., 1.09 chs.dist.,  
marked T 14 S R 14 E. S 15 BT.

An aspen, 4 ins.diam., bears N.11°30'W., 39 lks.dist.,  
marked T 14 S R 14 E S 10 BT.

Land, mountainous.

Soil, 3rd. rate.

Timber, pine and aspen.

Mountainous land on 80.00 chs.

Note: The sky, being overcast, no observation for latitude was obtained.

Note:

On account of the broken character of the land and the large amount of snow the line bet.secs.11 and 14 cannot be run. The snow, as above mentioned, lies on the ground during the entire year.

N.0°01'W., on a random line, bet.secs.10 and 11.

40.00 Set temp.  $\frac{1}{4}$  sec.cor.

79.62 Fall 7 lks.W.of the cor.of secs.2-3-10 and 11, which is a sandstone, 14x12x8 ins.above ground, marked and witnessed as described by the surveyor general.

Note:

This cor.was buried under 3 ft.of snow.

Thence I run

S.0°02'W., on a true line,

Bet.secs.10 and 11.

Ascend abruptly over mountainous land, through heavy pine and aspen timber, along steep east slope.

10.00 Spur, projects E.

Descend.

21.00 Leave timber, bears E. and W.

27.50 Enter heavy timber, bears E. and W.

38.30 Hollow, 200 ft.deep, course NE.

Abrupt ascent.

39.81 Set a sandstone, 18x12x3 ins., 12 ins.in the ground, for  $\frac{1}{4}$

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

sec. cor., marked  $\frac{1}{4}$  on W. face, from which

An aspen, 12 ins. diam., bears N.  $84^{\circ}$  E., 4 lks. dist.,

marked  $\frac{1}{4}$  S 11 BT.

An aspen, 8 ins. diam., bears N.  $4^{\circ}$  W., 14 lks. dist.,

marked  $\frac{1}{4}$  S 10 BT.

45.74 Patmas Ridge, bears N  $45^{\circ}$  W. and S.  $45^{\circ}$  E.

Leave timber, bears NW. and SE.

Descend abruptly over steep west slope of sandstone ledges.

63.00 Hollow, 300 ft. deep, course W.

Abrupt ascent over sandstone ledges.

75.75 Patmas Ridge, bears N.  $21^{\circ}$  E. and S.  $21^{\circ}$  W.

Enter scattering timber.

Descend.

79.62 The cor. of secs. 10-11-14 and 15.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, pine and aspen.

Mountainous land on 79.62 chs.

June 18, 1908.

June 19 : At 7h. 01m., a.m., l.m.t., I set off  $39^{\circ}36'$  N., on lat. arc,  $23^{\circ}27'$  N., on decl. arc, and determine a meridian with the solar, at the cor. of secs. 15-16-21 and 22, which is a sandstone, 12x12x6 ins. above ground, marked and witnessed as described by the surveyor general.

Thence I run

N.  $0^{\circ}02'$  W., bet. secs. 15 and 16.

Ascend abruptly over mountainous land, through dense mountain mahogany.

21.80 Ridge, bears NE. and SW.

Abrupt descent.

24.50 Enter heavy timber, bears NE. and SW.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

- 40.00 Set a sandstone, 15x10x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which
- A pine, 12 ins. diam., bears S. 49° W., 19 lks. dist., marked  $\frac{1}{4}$  S 16 BT.
- An aspen, 6 ins. diam., bears N. 51° E., 27 lks. dist., marked  $\frac{1}{4}$  S 15 BT.
- 66.00 Hollow, 200 ft. deep, course NW.
- Abrupt ascent.
- Leave heavy timber, bears NW. and SE.
- Enter scattering timber.
- 70.00 Spur, projects NW.
- Abrupt descent.
- 74.00 Wood road, bears NE. and SW.
- 74.50 Bottom of Bear Canyon, 1000 ft. deep, course SW.
- Leave timber.
- Abrupt ascent.
- 80.00 Set a sandstone, 16x6x6 ins., 11 ins. in the ground, for cor. of secs. 9-10-15 and 16, marked with 4 notches on S. and 3 notches on E. edges, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, W. of cor.
- Pits impracticable.
- Land, mountainous.
- Soil, rocky, 3rd. rate.
- Timber, aspen and pine.
- Mountainous land on 80.00 chs.
- 
- S. 89° 56' E., on a random line, bet. secs. 10 and 15.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 80.04 Intersect N. and S. line, 17 lks. S. of the cor. of secs. 10-11-14 and 15.
- Thence I run
- S. 89° 57' W., on a true line,
- Bet. secs. 10 and 15.

SUBDIVISIONS OF T.14 S., R.14 E.

CHAINS

- Ascend over mountainous land, through scattering timber.
- 1.00 Patmas Ridge, bears N.10°E. and S.10°W.  
Abrupt descent.
- 4.00 Leave live timber, enter dead timber.
- 27.00 Hollow, 800 ft. below top of ridge, course N.  
Abrupt ascent.
- 38.50 Rocky spur, projects N.  
Abrupt descent.  
Enter scattering live timber.
- 40.02 Set a sandstone, 12x10x6 ins., 8 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, from which
  - A pine, 18 ins. diam., bears N.81°E., 33 lks. dist., marked  $\frac{1}{4}$  S 10 BT.
  - A pine, 7 ins. diam., bears S.89°E., 31 lks. dist., marked  $\frac{1}{4}$  S 15 BT.
- 42.50 Enter heavy timber, bears NE. and SW.
- 72.25 Bottom of Bear Canyon, 2050 ft. below Patmas Ridge, course SW.  
Leave timber, bears NE. and SW.  
Abrupt ascent.
- 79.10 Spur, projects S.  
Descend.
- 80.04 The cor. of secs. 9-10-15 and 16.  
Note:  
The angle of elevation from this cor. to the top of Patmas Ridge, 79.00 chs. east is 20°45'  
Land, mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, aspen and pine.  
Mountainous land on 80.04 chs.  
June 19 : At this cor. I set off 23°27' N., on decl. arc, and at 0h. 01m., p.m., l.m.t., observe the sun on the meridian, the resulting lat. is 39°37' N.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

From the  $\frac{1}{4}$  sec. cor. bet. secs. 3 and 10, which is a sandstone  
12x8x6 ins. above ground, marked and witnessed as described  
by the surveyor general, I run

West, on a true line, bet. secs. 3 and 10.

Descend abruptly over sandstone ledges.

6.00 Hollow, 200 ft. deep, course SW.

Abrupt ascent.

18.00 Ridge, bears NE. and SW.

Abrupt descent through dead and fallen timber.

39.92 At a point S.0°02'E., from the  $\frac{1}{4}$  sec. cor. bet. secs. 3 and 4.

Set a sandstone, 18x14x6 ins., 12 ins. in the ground, for  
cor. of secs. 3-4-9 and 10, marked with 5 notches on S. and 3  
notches on E. edges, and raise a mound of stone, 2 ft. base,  
1 $\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, dead and fallen pine.

Mountainous land on 39.92 chs.

From the cor. of secs. 3-4-9 and 10, I run

N.0°02'W., on a random line, bet. secs. 3 and 4.

39.00 Intersect the  $\frac{1}{4}$  sec. cor. bet. secs. 3 and 4, which is a  
sandstone, 12x12x8 ins. above ground, marked and witnessed  
as described by the surveyor general.

Thence I run

S.0°02'E., on a true line,

Bet. secs. 3 and 4.

Ascend abruptly over sandstone ledges, through scattering  
pine timber.

4.50 Rocky Ridge, bears NE. and SW.

Abrupt descent.

11.50 Hollow, 150 ft. deep, course W.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

- Abrupt ascent.
- 17.25 Spur, projects W.  
Abrupt descent.
- 19.35 Hollow, 150 ft. deep, course W.  
Abrupt ascent.
- 27.00 Ridge, bears NE. and SW.  
Leave timber.  
Abrupt descent.
- 38.50 Hollow, 800 ft. deep, course SW.  
Abrupt ascent.
- 39.90 The cor. of secs. 3-4-9 and 10.  
Land mountainous.  
Soil, rocky, 3rd. and 4th. rate.  
Timber, pine.  
Mountainous land on 39.90 chs.
- 
- From the cor. of secs. 9-10-15 and 16, I run  
N. 0° 02' W., on a random line bet. secs. 9 and 10.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.76 Intersect the cor. of secs. 3-4-9 and 10.  
Thence I run  
S. 0° 02' E., on a true line,  
Bet. secs. 9 and 10.  
Ascend abruptly along steep west slope, through dead and  
fallen pine timber.
- 6.90 Spur, projects SW.  
Abrupt descent.
- 11.50 Hollow, 200 ft. deep, course SW.  
Abrupt ascent.
- 16.90 Spur, projects S.W.  
Abrupt descent.
- 24.00 Hollow, 200 ft. deep, course W.  
Abrupt ascent.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

39.88 Ridge, bears NE. and SW.

Set a sandstone, 15x10x6 ins., 10 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, and raise a mound of stone, 2 ft. base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Abrupt descent.

79.76 The cor. of secs. 9-10-15 and 16.

Land mountainous.

Soil, rocky, 3rd. rate.

Timber, dead pines.

Mountainous land on 79.76 chs.

June 19, 1908

---

June 20 : At 7h. 01m., a.m., l.m.t., I set off  $39^{\circ}37'N.$ , on lat. arc,  $23^{\circ}28'N.$ , on decl. arc, and determine a meridian with the solar, at the cor. of secs. 8-9-16 and 17, which is a cross on a sandstone ledge, marked and witnessed as described by the surveyor general.

Thence I run  $S.89^{\circ}49'E.$ , on a random line, bet. secs. 9 and 16.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.84 Intersect N. and S. line, 7 lks. S. of the cor. of secs. 9-10-15 and 16.

Thence I run

$N.89^{\circ}52'W.$ , on a true line,

Bet. secs. 9 and 16.

Abrupt descent along steep south slope through dense oak and mountain mahoganies.

0.70 Hollow, 300 ft. deep, course S.

Abrupt ascent.

16.80 Spur, projects SE.

Descend.

22.00 Hollow, 200 ft. deep, course SE.

Abrupt ascent.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

- 39.92 Set a sandstone, 16x8x6 ins., 11 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, and raise a mound of stone, 2 ft. base, 1 $\frac{1}{2}$  ft. high, N. of cor.  
Pits impracticable.
- 40.50 Ridge, bears NE. and SW.  
Abrupt descent along steep north slope.  
Enter scattering pine and aspen timber.
- 61.50 Hollow, 100 ft. deep, course NW.  
Abrupt ascent.
- 66.50 Spur, projects N.  
Abrupt descent.  
Leave timber.
- 77.25 Spring branch, 3 lks. wide, in bottom of Water Canyon, 800 ft. deep, course SW.  
Abrupt ascent.
- 78.10 Road, bears NE. and SW.
- 79.84 The cor. of secs. 8-9-16 and 17.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
Timber, aspen and pine.  
Mountainous land on 79.84 chs.  
June 20: At this cor. I set off 23° 27' N., on decl. arc, and at 0h. 01m., p.m., 1.m.t., observe the sun on the meridian, the resulting lat. is 39° 37' N.
- 
- N. 0° 05' W., bet. secs. 8 and 9.  
Ascend abruptly along steep, rocky east slope, through scattering mountain mahoganies.
- 32.00 Spur, projects E.  
Descend along steep east slope.
- 36.60 Enter heavy aspen timber, bears E. and W.
- 40.00 Set a sandstone, 18x8x8 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

An aspen, 4 ins. diam., bears S. 72° E., 9 lks. dist.,  
marked  $\frac{1}{4}$  S 9 BT.

An aspen, 5 ins. diam., bears S. 8° W., 19 lks. dist.,  
marked  $\frac{1}{4}$  S 8 BT.

42.55 Hollow, 150 ft. deep, course E.

Leave timber.

Abrupt ascent.

53.40 Spur, projects E.

Descend along steep east slope.

69.75 Hollow, 200 ft. deep, course SE.

Abrupt ascent.

80.00 Set a sandstone, 18x11x6 ins., 12 ins. in the ground, for  
cor. of secs. 4-5-8 and 9, marked with 5 notches on S. and  
4 notches on E. edges, and raise a mound of stone, 2 ft.  
base,  $1\frac{1}{2}$  ft. high, W. of cor.

Pits impracticable.

Land, mountainous.

Soil, rocky, 3rd. and 4th. rate.

Timber, aspen.

Mountainous land on 80.00 chs.

---

S. 89 52' E., on a random line, bet. secs. 4 and 9.

40.00 Set temp.  $\frac{1}{4}$  sec. cor.

79.94 Intersect N. and S. line, 28 lks. N. of the cor. of secs.  
3-4-9 and 10.

Thence I run

N. 89° 40' W., on a true line,

Bet. secs. 4 and 9.

Abrupt descent over mountainous land, through dense oak  
and mountain mahoganies.

0.90 Hollow, 800 ft. deep, course SW.

Abrupt ascent along steep south slope.

18:00 Spur, projects SW.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

- Enter heavy pine timber.  
Abrupt descent.
- 30.25 Spring branch, 3 lks. wide, in bottom of Water Canyon, 1200 ft. deep, course SW.  
Abrupt ascent.  
Leave heavy timber.  
Enter scattering pine and aspen timber.
- 39.66 Road, bears N. and S.
- 39.97 Set a sandstone, 18x14x4 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on N. face, from which  
A pine, 6 ins. diam., bears N. 47° E., 83 lks. dist., marked  $\frac{1}{4}$  S 4 BT.  
An aspen, 8 ins. diam., bears S. 82° E., 1.19 chs. dist., marked  $\frac{1}{4}$  S 9 BT.
- 58.00 Enter heavy aspen timber, bears NW. and SE.
- 63.00 Leave timber, bears N. and S.
- 79.94 The cor. of secs. 4-5-8 and 9.  
Land, mountainous.  
Soil, rocky, 3rd. rate.  
Timber, aspen and pine.  
Mountainous land on 79.94 chs.
- June 20, 1908.
- 
- June 21: At 7h. 01m., a.m., l.m.t., I set off 39° 37' N., on lat. arc, 23° 28' N., on decl. arc, and determine a meridian with the solar at the cor. of secs. 4-5-8 and 9.  
Thence I run  
N. 0° 03' W., on a random line, bet. secs. 4 and 5.
- 40.00 Set temp.  $\frac{1}{4}$  sec. cor.
- 79.80 Intersect N. bdy. of Tp., 5 lks. east of the cor. of secs. 4-5-32 and 33, which is a sandstone, 14x7x6 ins. above ground, marked and witnessed as described by the surveyor general.

## SUBDIVISIONS OF T.14 S., R.14 E.

## CHAINS

Thence I run

S.0°05'W., on a true line,

Bet. secs. 4 and 5.

Ascend abruptly over mountainous land, through scattering aspen and pine timber.

9.85 Spur, projects W.

Abrupt descent.

Leave timber.

24.00 Hollow, 500 ft. deep, course NW.

Enter heavy aspen timber.

Abrupt ascent.

39.80 Set a sandstone, 18x8x5 ins., 12 ins. in the ground, for  $\frac{1}{4}$  sec. cor., marked  $\frac{1}{4}$  on W. face, from which

An aspen, 5 ins. diam., bears S.19°E., 10 lks. dist., marked  $\frac{1}{4}$  S 4 BT.

An aspen, 5 ins. diam., bears N.61°W., 3 lks. dist., marked  $\frac{1}{4}$  S 5 BT.

45.85 Ridge, bears E. and W.

Leave timber.

Abrupt descent.

56.25 Hollow, 400 ft. deep, course W.

Enter heavy aspen timber.

Abrupt ascent.

74.00 Ridge, bears NE. and SW.

Leave timber.

Abrupt descent.

79.80 The cor. of secs. 4-5-8 and 9.

Land mountainous.

Soil rocky, 3rd. rate.

Timber, aspen and pine.

Mountainous land on 79.80 chs.

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FINAL OATHS OF DEPUTY SURVEYOR AND HIS ASSISTANTS.

LIST OF NAMES.

A list of the names of the individuals employed by \_\_\_\_\_, United States Deputy Surveyor, to assist in running, measuring, and marking the lines and corners described in the foregoing field notes of the survey of \_\_\_\_\_ showing the respective capacities in which they acted:

For list of names and final oaths of assistants see book "X", Chainman. T. 13 S., R. 16 E. \_\_\_\_\_, Chainman. \_\_\_\_\_, Moundman. \_\_\_\_\_, Moundman. \_\_\_\_\_, Axman. \_\_\_\_\_, Axman. \_\_\_\_\_, Flagman.

FINAL OATH OF ASSISTANTS.

We hereby certify that we assisted \_\_\_\_\_, United States Deputy Surveyor, in surveying all those parts or portions of the \_\_\_\_\_ of the \_\_\_\_\_ meridian, \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for \_\_\_\_\_

\_\_\_\_\_, Chainman. \_\_\_\_\_, Chainman. \_\_\_\_\_, Moundman. \_\_\_\_\_, Moundman. \_\_\_\_\_, Axman. \_\_\_\_\_, Axman. \_\_\_\_\_, Flagman.

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 190 }



FINAL OATH OF UNITED STATES DEPUTY SURVEYOR.

I, \_\_\_\_\_, United States Deputy Surveyor, solemnly swear that, in pursuance of a contract received from \_\_\_\_\_ United States Surveyor General for \_\_\_\_\_, bearing date of \_\_\_\_\_ day of \_\_\_\_\_, 190\_\_\_\_, I have well, faithfully, and truly, in my own proper person, and in strict conformity with the instructions furnished by the United States Surveyor General for \_\_\_\_\_, the Manual of Surveying Instructions, and the laws of the United States, surveyed all those parts or portions of \_\_\_\_\_

For final affidavit see book "X" T. 13 S. ., R. 16 E.

\_\_\_\_\_ of the \_\_\_\_\_ meridian, in the \_\_\_\_\_ of \_\_\_\_\_, which are represented in the foregoing field notes as having been surveyed by me, and under my direction; and I do further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the Manual of Surveying Instructions, and the special written instructions of the United States Surveyor General for \_\_\_\_\_ and in the specific manner described in the field notes, and that the foregoing are the original field notes of such survey.

United States Deputy Surveyor

Subscribed by said \_\_\_\_\_, and sworn to before me }  
this \_\_\_\_\_ day of \_\_\_\_\_, 190\_\_\_\_



APPROVAL.

OFFICE OF THE UNITED STATES SURVEYOR GENERAL,

Salt Lake City, Utah, April 30, \_\_\_\_\_, 190\_\_\_\_

The foregoing field notes of the survey of \_\_\_\_\_ the subdivisional lines of fractional Township No. 14 South, Range No. 14 East of the Salt Lake Base and \_\_\_\_\_ Meridian, Utah, \_\_\_\_\_

executed by \_\_\_\_\_ Harvey D. Heist and Job H. Winwood under <sup>their</sup> contract No. \_\_\_\_\_ 298, dated \_\_\_\_\_ March 21, \_\_\_\_\_, 190\_\_\_\_, having been critically examined, and the necessary corrections and explanations made, the said field notes, and surveys they describe, are hereby approved.

*Thomas Hill*  
United States Surveyor General

I certify that the foregoing transcript of the field notes of the above-described surveys in \_\_\_\_\_, has been correctly copied from the original notes on file in this office

United States Surveyor General

INDEX DIAGRAM.

Township 22 S., Range 18 E.

6	135	5	122	4	112	3	103	2	95	1
134		133		120		111		103		95
7	132	8	119	9	111	10	102	11	94	12
132		131		118		110		101		93
18	130	17	118	16	109	15	100	14	93	13
129		129		117		108		106		92
19	128	20	116	21	108	22	99	23	91	24
127		126		116		107		98		90
30	125	29	115	28	106	27	98	26	89	25
124		123		114		105		97		88
31	122	32	113	33	105	34	96	35	88	36

Meanders Page \_\_\_\_\_

BOOK A-349

# INDEX DIAGRAM.

Township 22 S, Range 19 E

6	192	5	181	4	174	3	164	2	154	1
191		190		180		173		164		153
7	190	8	179	9	172	10	163	11	153	12
189		188		179		172		162		152
18	188	17	178	16	171	15	162	14	151	13
187		186		177		170		160		150
19	186	20	177	21	169	22	160	23	149	24
185		184		176		168		159		148
30	184	29	176	28	167	27	157	26	148	25
183		183		175		166		156		147
31	182	32	174	33	165	34	155	35	146	36

Meanders Page 193-196

INDEX DIAGRAM.

Township 23 S. Range 19 E.

<sup>6</sup> 249	<sup>5</sup> 236	<sup>4</sup> 229	<sup>3</sup> 223	<sup>2</sup> 215	<sup>1</sup>
248	247	236	229	222	214
<sup>7</sup> 247	<sup>8</sup> 235	<sup>9</sup> 228	<sup>10</sup> 221	<sup>11</sup> 213	<sup>12</sup>
246	245	235	228	220	213
<sup>18</sup> 245	<sup>17</sup> 234	<sup>16</sup> 227	<sup>15</sup> 220	<sup>14</sup> 212	<sup>13</sup>
244	243	233	227	219	211
<sup>19</sup> 243	<sup>20</sup> 233	<sup>21</sup> 226	<sup>22</sup> 219	<sup>23</sup> 211	<sup>24</sup>
242	241	232	225	218	210
<sup>30</sup> 240	<sup>29</sup> 232	<sup>28</sup> 225	<sup>27</sup> 217	<sup>26</sup> 209	<sup>25</sup>
239	238	231	224	217	209
<sup>31</sup> 237	<sup>32</sup> 230	<sup>33</sup> 223	<sup>34</sup> 216	<sup>35</sup> 208	<sup>36</sup>

Meanders Page .....

INDEX DIAGRAM.

Township 22 S., Range 20 E.

6	307	5	292	4	283	3	275	2	267	1
306		305		291		283		275		266
7	304	8	290	9	282	10	274	11	266	12
303		302		289		281		273		265
18	301	17	289	16	281	15	273	14	264	13
300		300		288		280		272		264
19	299	20	287	21	279	22	271	23	263	24
298		297		287		278		271		262
30	296	29	286	28	277	27	270	26	261	25
295		294		285		277		269		261
31	293	32	284	33	276	34	268	35	260	36

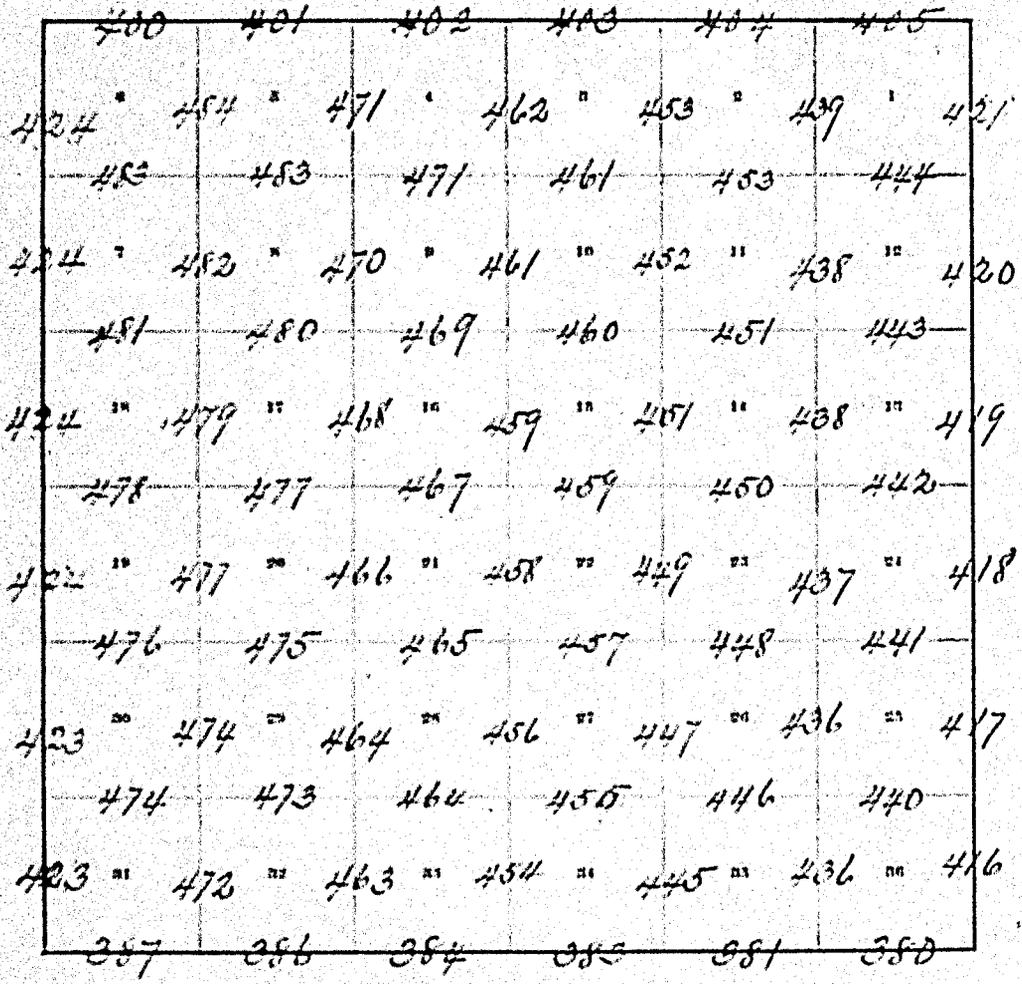
INDEX DIAGRAM.

Township 23 S, Range 20 E

6	369	5	354	4	344	3	335	2	326	1
	368		367		354		343		335	
7	366	8	353	9	343	10	334	11	324	12
	366		364		352		342		333	
18	363	17	351	16	341	15	332	14	322	13
	362		361		350		340		331	
19	360	20	349	21	340	22	331	23	321	24
	359		359		348		339		330	
30	358	29	347	28	338	27	329	26	320	25
	357		356		346		337		328	
31	355	32	345	33	336	34	327	35	318	36

# INDEX DIAGRAM.

Township 15 S., Range 12 E.



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BOOK A-349

INDEX DIAGRAM.

Township 14 <sup>8</sup>, Range 14 <sup>8</sup>

6	5	506	501	4	3	2	1
	508	505	501				
7	8	504	502	497	11		12
		503	499				
18	17		498	496	14		13
19	20	21	22	23			24
30	29	28	27	26			25
31	32	33	34	35			36

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" F "

STANDARD SURVEYING INSTRUMENTS

BOOK A-349

FILED  
SEP 30 1908  
*MHD*

# FIELD NOTES

OF THE SURVEY OF THE

EAST and SOUTH BOUNDARIES

of

Township No. 23 South,

Range No. 20 East,

Of the Salt Lake Base and Meridian,

in the state of Utah

AS SURVEYED BY

Harvey D. Heist and Job H. Winwood, United States Deputy Surveyors

their

Under ~~his~~ Contract No. 298, dated March 21, 1907

Survey commenced March 23, 1908

Survey completed March 26, 1908

*East Bdy high 6-03-05  
South Bdy high 6-00-50*

STON G. PETERSON  
MEMBER

W. J. PARKER  
CHAIRMAN

JOSEPH CHEZ  
MEMBER

172A



THE STATE OF UTAH  
STATE ROAD COMMISSION  
SALT LAKE CITY

AGNES McNEIL  
SECRETARY

H. S. KERR  
CHIEF ENGINEER

N.R.F.L.P. 10A  
Crescent-Valley City

DISCRIPTION OF CORNER MONUMENT

A 3" bronz disc was set in concrete 12" below the surface and 1' to the west of the  $\frac{1}{2}$  of Crescent-Valley City highway, marked thus: , for the  $\frac{1}{4}$  cor. of sections 9 and 10 T.22S., R.19E., S.L.B. & M. The corner was witnessed by 4-1" steel pins, extending 6" above the ground, set as indicated.

